



Sewer System Management Plan

2013 Revision

Table of Contents

Introduction	1
Element 1: Goals	3
Element 2: Organization	5
Element 3: Legal Authority	8
3.1 Regulatory Requirements for Legal Authority Element	8
3.2 Element 3 Appendix	8
3.3 Municipal Code	8
3.4 Prevention of Illicit Discharge	8
3.5 Proper Design and Construction of Sewers and Connentions	9
3.6 Lateral Maintenance	10
3.7 Limit Discharge of FOG and Other Debris	10
3.8 Enforcement Measures	10
Element 4: Operation and Maintenance Program	12
4.1 Element 4 Appendix	12
4.2 Collection System Map Discussion	12
4.3 Prioritized Preventive Maintenance Discussion	12
4.3.1 Sewer Cleaning	12
4.3.2 Root Control	13
4.3.3 Lift Station Maintenance	13
4.3.4 Odor Control	13
4.3.5 Corrosion Control	13
4.3.6 Investigation of Customer Complaints	13
4.3.7 Maintenance Management and Work Orders	14
4.4 Scheduled Inspections and Contidion Assessment Discussion	14
4.4.1 Manhole Inspection	15
4.4.2 Pipeline Inspection	16
4.4.3 Pump Station Inspection and Assessment	16
4.5 Contingency Equipment and Replacemanet Inventories	17
4.6 Training Discussion	17

Element 5: Design & Construction Standards	19
5.1 Regulatory Requirements for Disign & Construction Standards	19
5.2 Element 5 Appendix	19
5.3 Design & Construction Standards Discussion	19
Element 6: Overflow Emergency Response Plan	20
6.1 Regulatory Requirements for Overflow Emergency Response Plan Element.....	20
6.2 Sewer Overflow Response Plan.....	20
Element 7: Fats, Oils, and Grease (FOG) Control Program	29
7.1 Regulatory Requirements for FOG Control Element	29
7.2 Element 7 Appendix	29
7.3 Summary of FOG Elements Identified by the State	30
7.4 Fog Control Discussion.....	31
7.5 Identification and Sewer Cleaning.....	31
7.6 Legal Authority.....	32
7.7 Facility Inspection.....	34
7.8 Public Outreach.....	34
Element 8: Capacity Management	35
8.1 Regulatory Requirements for Capacity Management	35
8.2 Capacity Evaluation Discussion	35
8.2.1 Hydraulic Model	36
8.2.2 Flow Estimates	37
8.2.3 Capacity Evaluation Criteria	37
8.2.4 Capacity Evaluation Results	37
8.3 Recommended Capacity Projects	37
8.3.1 Design Criteria	38
8.3.2 Recommended Capacity Improvements	38
8.4 CIP Schedule	38
8.5 Financial and Economic Analysis	38
Element 9: Monitoring, Measurement, & Program Modification	39
9.1 Regulatory Requirements for Monitoring, Measurement, & Program Modifications	39
9.2 Element 9 Appendix	39

Element 9: Monitoring, Measurement, & Program Modification (<i>Continued</i>)	39
9.3 Monitoring and Measurement Discussion	39
9.4 SSMP Modifications	39
Element 10: SSMP Audit	40
10.1 Regulatory Requirements for SSMP Audit	40
10.2 Element 10 Appendix	40
10.3 SSMP Audit Discussion	40
Element 11: Communication Program	41
11.1 Regulatory Requirements for Communication Program	41
11.2 Communication Program Discussion	41
Appendix A	A-1
Appendix B	B-1
Appendix C	C-1
Appendix D	D-1
Appendix E	E-1
Appendix F	F-1
Appendix G	G-1
Appendix H	H-1

INTRODUCTION

This introductory section provides background information on the purpose and organization of this Sewer System Management Plan and provides a brief overview of the City of Brentwood's service area and sewer system.

SSMP Requirement Background

In May 2006, the State Water Resources Control Board ("SWRCB") implemented Order No. 2006-0003-DWQ requiring any municipality which owns or operates a sanitary sewer system greater than 1.0 mile in length and collects and/or conveys untreated or partially treated wastewater to publicly owned treatment plants in the State of California are required to comply with the terms of this order. This order requires the development and implementation of a system-specific Sewer System Management Plan ("SSMP"). This SSMP will facilitate the overall management of the City of Brentwood's Sewer System.

Document Organization

This SSMP is intended to meet the requirements of the Statewide General Waste Discharge Requirements ("GWDR"). The organization of this document is consistent with the SWRCB requirements. This SSMP includes eleven elements, as listed below:

- 1. Goals**
- 2. Organization**
- 3. Legal Authority**
- 4. Measures and Activities (Operation and Maintenance Program)**
- 5. Design and Construction Standards (Design and Performance Provisions)**
- 6. Overflow Emergency Response Plan**
- 7. Fats, Oils and Grease Control Program**
- 8. Capacity Management (System Evaluation and Capacity Assurance Plan)**
- 9. Monitoring, Measurement, and Program Modification**
- 10. SSMP Audits**
- 11. Communication Plan**

Each element section is organized into sub-sections, as follows:

1. Description of the SWRCB requirement for that element.
2. Identification of associated appendix and list of supporting information included in the appendix.
3. Discussion of element. The discussion may be split into multiple sub-sections depending on length and complexity.

Supporting information for each element is included in an appendix associated with that section, as applicable. In general, information expected to require relatively frequent updates (such as names and phone numbers of staff) are included in appendices, as well as other supporting information, such as forms or schedules.

Introduction: (Cont.)

City Service Area and Sewer System

The City of Brentwood is located in Eastern Contra Costa County and is surrounded by the Cities of Antioch, Oakley, Knightsen, Discovery Bay, and Byron. As of January 2012, the City population is approximately 52,575 based on City of Brentwood Community Development Department estimates. The projected population growth of the City is to reach 75,000 by the year 2020.

The City of Brentwood's Wastewater Treatment Plant receives wastewater from approximately 16,068 residential connections and 479 commercial business connections. The City's sewer system consists of approximately 188 miles of pipe, ranging from 4 inches to 42 inches in diameter, and two lift stations (Sellers and Dreamcatcher). The City provides sewer service to most businesses and residents within the City. The City maintains the sewer system with the use of two combination trucks (suction and high pressure jet cleaning hoses) and a CCTV (Closed Circuit Television) van to inspect the City's infrastructure and laterals. The City also provides maintenance and emergency response services for the entire sewer system.

Element 1: GOALS

This section identifies the goals the City of Brentwood has developed for the management, operation, and maintenance of all parts of the sewer system. It also evaluates the role of the SSMP in supporting these goals.

Suggested SSMP from the CWEA: *The standards for the operation and maintenance of a wastewater collection system are to properly operate and maintain all portions of the collection system, to report overflows, and to respond effectively to any overflows which may occur. The collection system agency's goals should be at a high level which meets the requirements.*

Goals:

The main goal of the City's SSMP is to minimize the number and impact of sanitary sewer overflows ("SSO") which occur. This plan aims to provide a standard set of protocols to provide consistent, efficient management and operation of the City's collection system. The following list constitutes the SSMP goals:

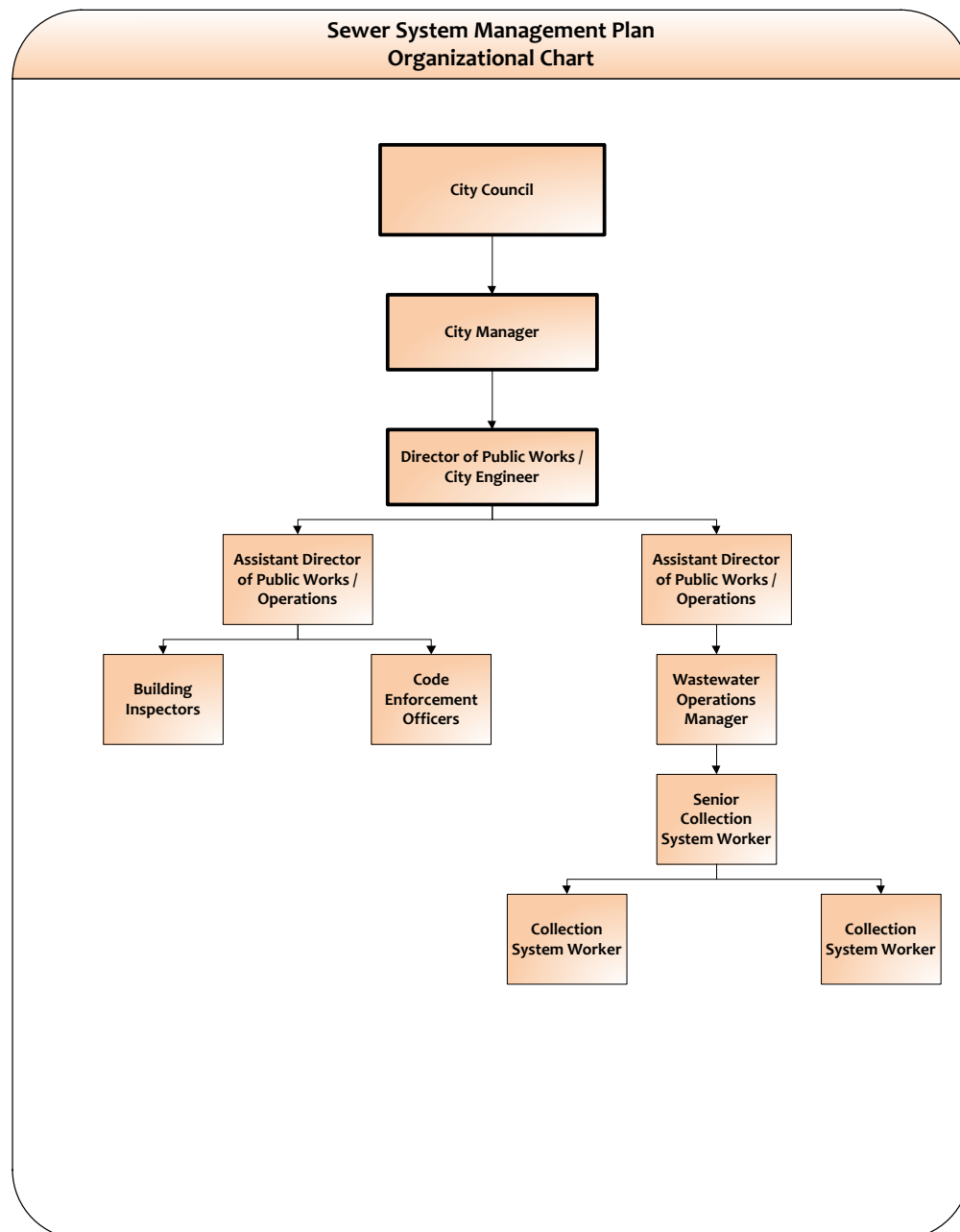
- 1. Minimize the number and impact of SSOs.**
- 2. Maintain existing infrastructure and plan for future CIP projects.**
- 3. Continue to provide capacity evaluation for the collection system and plan for future growth.**
- 4. Develop a plan to increase the number of staff to meet the obligations of the SSMP.**
- 5. Detect and reduce Inflow and Infiltration into system.**
- 6. Operate in a safe and efficient manner.**

This SSMP coincides with the City's existing Operation and Maintenance Program and Goals by providing quality, consolidated guidelines and procedures for all portions of the City's sewer system management. The SSMP will contribute to the proper management of the collection system and assist the City in minimizing the frequency and impact of SSOs by providing guidance for appropriate maintenance, capacity management, and emergency response.

Element 2: ORGANIZATION

This section of the SSMP identifies the City's organizational structure, chain of command, and communication flow for responding to SSOs and other related sewer calls. Also, this section identifies who will be responsible for managing and reporting any information related to the Sewer System Management Plan. The organization chart below shows the chain of command used for SSOs.

Sewer System Management Plan Organizational Chart Chain of Command



Element 2: ORGANIZATION (Cont.)

The roles established by the SSMP for the Wastewater Collection System staff for the City of Brentwood are as follows:

City Council – Establish policy.

City Manager, Public Works Director, Assistant Public Works Directors, and Wastewater Manager – Enforce policy, plan strategy, lead staff, allocate resources, delegate responsibility, authorize outside contractors to perform services, lead emergency response and may serve as public information officer.

City Engineers – Prepare wastewater collection system planning documents, manage capital improvement projects, and document new and rehabilitated assets.

Inspectors – Ensure new and rehabilitated assets meet agency standards, and work with collection crew in handling emergencies when contractors are involved.

Code Enforcement – Enforce laws and regulations when called on by city staff or when discovering an existing or current violation.

Senior Collection System Worker – Manage field operations and maintenance activities, provide relevant information to management, prepare and implement contingency plans, investigate and report SSOs, and train field crews.

Collection Crew – Conduct preventative and corrective maintenance activities, respond to notification of stoppages and SSOs, and transport equipment to location to correct problem.

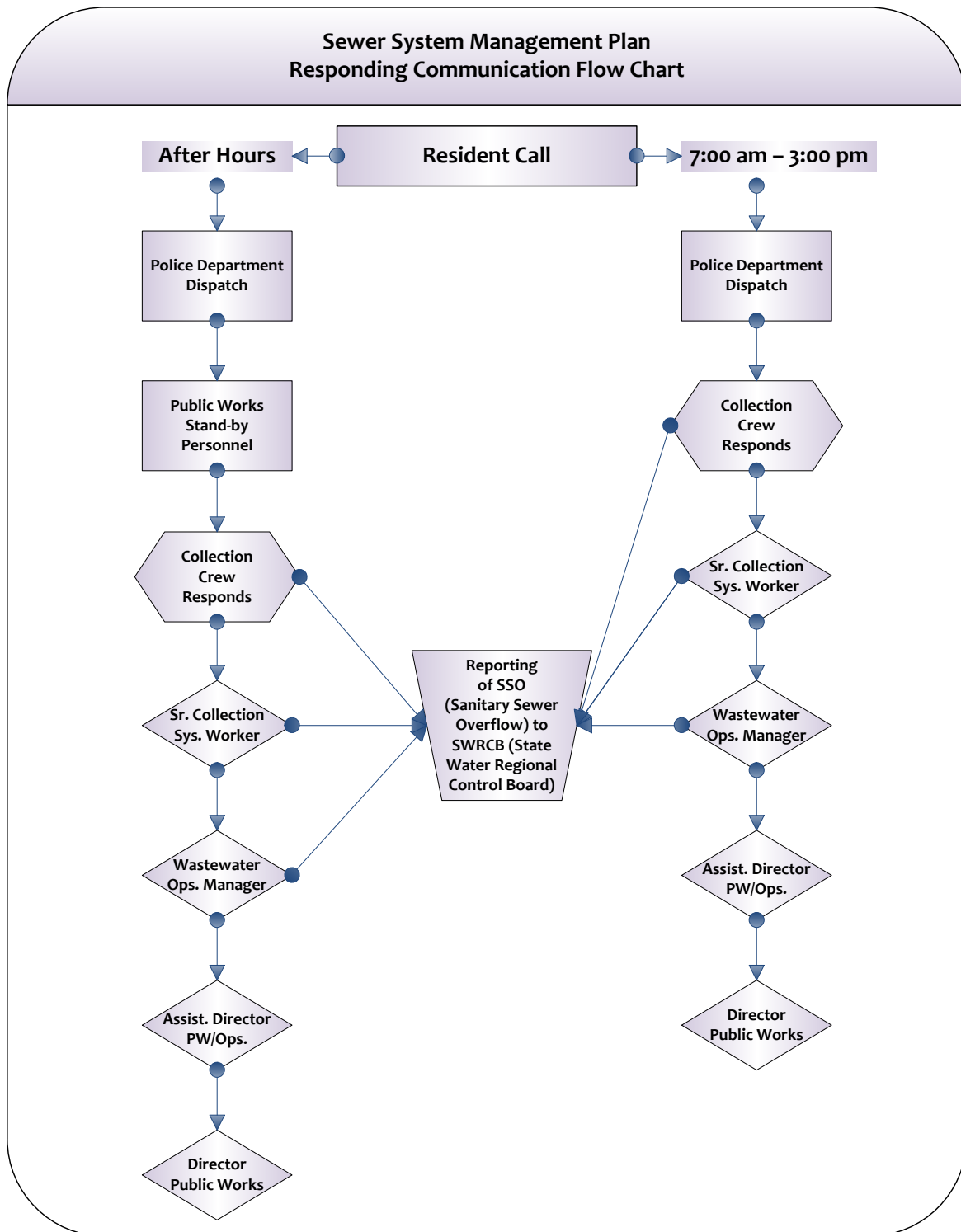
The organization chart below shows the responding communication flow chart in the event of notification of a potential SSO.

Element 2: ORGANIZATION (Cont.)

Communication Flow

Chart

Chain of Communication for reporting an SSO:



Element 2: ORGANIZATION (Cont.)

As it relates to an SSO, upon receiving a call regarding an overflow, Collection staff is first dispatched to investigate. They would notify the Senior Collection System Worker as to the severity of the overflow. The Senior Collection System Worker would then report to the Wastewater Operations Manager. These are three key elements in the process of reporting an SSO in addition to understanding the category the SSO falls under. When the spill is mitigated and the original problem is determined, a plan will be developed to fix the problem and minimize possible future SSOs at that location. The Wastewater Operations Manager, Senior Collection System Worker, and Collection crew will work as a team to gather data which will be used to document and report the SSO. The City of Brentwood is dedicated to meeting requirements and to maintaining a productive sewer system.

Appendix A contains the names of authorized City personnel, their titles, and phone numbers for notification purposes associated with this SSMP.

Element 3: LEGAL AUTHORITY

This element of the SSMP discusses the City's Legal Authority, including its Municipal Code and agreements with other agencies. This section fulfills the Legal Authority requirement for the SWRCB (Element 3).

3.1 Regulatory Requirements for Legal Authority Element

SWRCB Requirement: *The City must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:*

- a. Prevent illicit discharges into its wastewater collection system (examples may include infiltration (I/I), storm water, chemical dumping, unauthorized debris, etc.);*
- b. Require sewers and connections be properly designed and constructed;*
- c. Ensure access for maintenance, inspection, or repair for portions of the lateral owned or maintained by the Public Agency;*
- d. Limit the discharge of fats, oils, and grease and other debris causing blockage; and*
- e. Enforce any violation of its sewer ordinances.*

3.2 Element 3 Appendix

Supporting information for Element 3 is included in Appendix D. This appendix includes the following documents:

1. Chapter 13.04 SEWER SYSTEM – RULES AND REGULATIONS, of the City's Municipal Code; and
2. Diagram illustrating lateral maintenance responsibilities.

3.3 Municipal Code

The legal authority required for the SSMP by the SWRCB is contained within the City's Municipal Code. One chapter of the Municipal Code is dedicated to the sewer system; it is included in Title 13:

- Chapter 13.04 Sewer System – Rules and Regulations

Chapter 13.04 as listed above pertains to the legal authority required for fulfillment of the SSMP requirements. This chapter is also included in full in Appendix D. Portions of this chapter are discussed in the following sub-sections as they pertain to prevention of illicit discharges, proper design and construction of sewer and connections, maintenance access, and enforcement measures.

3.4 Prevention of Illicit Discharge

All measures prohibiting illicit discharges are included in Chapter 13.04, Sewer System Rules and Regulations. The specific purpose of the chapter is to prevent the discharge of any pollutant into the sewers which would obstruct or damage the collections system, interfere with treatment, or threaten harm to human health or the environment.

Element 3: LEGAL AUTHORITY (Cont.)

Examples of discharges covered are included below. Refer to the Municipal Code, included in Appendix D, for the complete text.

- Storm water and I/I – Section 13.04.075 prohibits any person from discharge, cause or allow or permit to be discharged any substance into a manhole or other opening in a community sewer except through an approved building sewer, unless that person has first obtained a permit to do so from the City. Section 13.04.130 prohibits any person from discharging any storm water, roof or yard drainage, etc. into the sewer without first obtaining a permit.
- Pretreatment and Industrial Waste – Section 13.04.150 states an industrial wastewater pretreatment system or device may be required by the city to treat industrial flows prior to discharge to the sewer when it is necessary to restrict or prevent the discharge to the sewer of certain waste constituents, to distribute more equally over a longer time period any peak discharges of industrial wastewaters or to accomplish any pretreatment results required by the City.
- Generally Prohibited Wastes – Section 13.04.085 prohibits discharge to any public sewer any wastes, if in the opinion of the City, those waste may have any adverse or harmful effect on sewers, maintenance personnel or equipment, wastewater treatment personnel or equipment, aquatic life in any waters receiving effluent from the sanitary sewer system, or may otherwise endanger the public, the local environment, or create a public nuisance. Section 13.04.090 sets forth standards prohibiting the discharge of several components, including (but not limited to) flammable liquids or explosives, solids, vapor, radioactive material, gases, or other toxic substances.

3.5 Proper Design and Construction of Sewers and Connections

Regulations pertaining to the design, construction, and inspection of private sewer systems, building sewers, and connections are included in Chapter 13.04 of the City of Brentwood's Municipal Code.

- Wastewater Discharge Permit Required – Section 13.04.175 states no person shall discharge, or cause or allow or permit to be discharged any industrial wastewaters directly or indirectly to sewage facilities owned by the city without first obtaining a city permit for industrial wastewater discharge. Section 13.04.180 lays out the requirements for obtaining a permit. The permit application may include review of plans and specifications by the City.
- Design and Construction Requirements – Section 13.04.055 requires all existing and new construction must conform to all current City codes with regards to the City's Standard Plans and Specifications.

Element 3: LEGAL AUTHORITY (Cont.)

- Inspection and Testing – Section 13.04.065 states all sewer construction work, building sewers, plumbing, and draining systems must be inspected by an inspector authorized by the city to insure compliance with all city requirements. All sewers and laterals must be tested and televised per Sections 71-1.08 and 71-1.11 in the Standard Plans and Specifications and must meet all requirements before City's approval will be completed. Section 71 of the City of Brentwood Standard Plans and Specifications is included in Appendix F.

3.6 Lateral Maintenance

Effective September 23, 2003, the Brentwood City Council approved a sewer lateral maintenance program for residents of single family homes. The program was implemented for maintenance, repair and/or replacement for the portion of the sanitary sewer lateral located between the property line and main line. Section 13.04.070 states the property owner must pay a monthly fee to qualify for this benefit. However, the City is not responsible for any sewer lateral of a commercial, industrial, and/or institutional sewer service.

3.7 Limit Discharge of FOG and Other Debris

As discussed under Element 4: Fats, Oils, and Grease (FOG) Control Program, City Municipal Code Section 13.04.085 prohibits discharge of any substance into the sewer system which has characteristics which could threaten to cause a interference or pass-through in the City's sewer lines. Section 13.04.155 requires any type of business or establishment where grease or other objectionable materials may be discharged into a public or private sewage main or disposal system shall have a grease removal device.

Discharge of debris is covered by Section 13.04.085, which states no person shall discharge to any public sewer any wastes, if in the opinion of the City, those wastes may have any adverse or harmful effect on sewers, maintenance personnel or equipment, wastewater treatment personnel or equipment, treatment plant effluent quality, or the public among other things. Also, no person shall discharge or cause to be discharged to a public sewer any waste creating a stoppage, plugging, breaking, any reduction in the sewer capacity, or any other damage to sewers or sewerage facilities of the City. Additionally, Section 13.01.075 prohibits any person from discharging any substance into a manhole or other opening in a community sewer.

3.8 Enforcement Measures

City Municipal Code Section 13.04.285 defines any use of any sanitary sewer system which does not conform to the regulations established in this chapter as illegal. Within thirty days following notice by the Director of Public Works or that an illegal use exists, corrective measures to eliminate the illegal use shall be made by the owner or responsible party except in cases where extensive or exceptional repairs or replacements to existing installations are required, the City may grant extensions of time or consent to temporary remedial arrangements.

Element 3: LEGAL AUTHORITY (Cont.)

Section 13.04.295 states any person who is found to have violated any provision of this chapter or any condition of a permit issued pursuant to this chapter, shall be, upon conviction, subject to a penalty in an amount not to exceed five hundred dollars or by imprisonment for not more than six months, or by both, for each offense as provided for in City ordinances. Each separate violation shall constitute a separate offense.

Element 4: OPERATION AND MAINTENANCE PROGRAM

This section of the SSMP discusses the City's operations, maintenance and other related measures and activities. The section fulfills the Operation and Maintenance Program SSMP requirement for the SWRCB (Element 4).

4.1 Element 4 Appendix

Supporting information for Element 4 is included in Appendix E. This appendix includes the following documents:

1. Equipment Inventory;
2. SSMP Preventive Maintenance Schedule for CCTV; and
3. Hot Spot Maintenance Schedule.

4.2 Collection System Map Discussion

The City has mapping books of the sewer and storm drain systems which is stored on the Map Room page of the City's intranet. The City is divided up into a grid making finding a location very straightforward. Each manhole (sewer and storm) in the City limits has been assigned a GPS coordinate for its exact location. The maps show the manhole ID, pipe size (as indicated on as-built plans), flow direction, and pipe diameter, as well as street names and addresses, and parcels ID numbers. The City's lift stations are also included on these maps.

The mapping books are based in the City's GIS files of the sewer system and are regularly updated when needed. The GIS files were originally created in 1999 and have continued to grow as the City nears build out.

When errors are discovered on the maps, the error is noted on the map itself. The area with errors is noted and given to the Public Works Engineering Division, and updates to the GIS and map books are completed by the Engineering Division. Wastewater and Engineering Divisions work hand and hand to keep this system as up to date as possible.

4.3 Prioritized Preventive Maintenance Discussion

The City prioritizes its preventive maintenance (PM) activities. The preventive maintenance program includes scheduled hot spot cleaning, quadrant cleaning, regular inspection of pump stations, as well as investigating customer problems and complaints. The follow subsection summarizes the City's preventive maintenance activities.

4.3.1 Sewer Cleaning

a. Hot Spot Cleaning

Approximately 7,500 ft of sewers (1% of the system) is included in the hot spot cleaning program. Hot spots are cleaned quarterly. Through the daily rounds procedures where heavy grease/problem areas and lift stations are checked, the City is able to find out which sections of pipe need cleaning possibly before the next scheduled day. Cleaning frequency depends on the history and causes of stoppages or overflows on a line.

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

The City's Collections Division maintains a schedule chart which helps with documenting and tracking the lines cleaned. The information on this schedule includes grid number, street name, start and finish manhole id number, length of pipe cleaned, amount of debris in the line, and a section to include information if the crew ran into any problems in the line. This process secures the City's goal of maintaining an effective cleaning program.

b. Quadrant Cleaning

Sewers smaller than 18 inches in diameter which are not included in the hot spot cleaning program are cleaned on a 4-year cycle (25% of City's sewer system per year). To achieve this goal, the City is split into four quadrants. This 4-year cycle is consistent with industry standards and is achievable with current staffing levels; however, with the ever increasing work load, additional staffing may be needed in the future.

4.3.2 Root Control

The City of Brentwood does not have a Root Foaming Program because root intrusion is not currently a problem in the City's sewer system. If roots become an issue, the City will take the necessary steps to begin a foaming program.

4.3.3 Lift Station Maintenance

City maintenance staff performs a daily inspection of the City's two lift stations, Sellers and Dreamcatcher, from the surface (no confined space entry). Comprehensive pump station maintenance is performed by City staff to clean wet wells and check for problems with pumps. If pumps have an issue, they are sent out to be overhauled and/or repaired.

4.3.4 Odor Control

The City receives approximately two (2) to five (5) odor complaints per year. These complaints are often calls which are not sewer related. When there are complaints, City crews jet clean sewer lines in the direct area to eliminate any possible odors and attempt to plug holes in manhole lids where odors may be escaping the system. However, the City does not currently have a formal odor control program.

4.3.5 Corrosion Control

Over 80 percent of the pipe material in the City's collection system is SDR 35 (PVC), which does not need corrosion control. The other 20 percent is vitrified clay (VCP) which also does not require a corrosion control program.

4.3.6 Investigation of Customer Complaints

When the City receives a call regarding a sewer issue (stoppages, overflows, and odors) the information is given to the Collection staff or the standby worker if the call is received after hours, and is responded to accordingly. Staff makes

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

contact with the home owner and assess the situation. Once a plan is developed to eliminate the issue, the crews begin work while staying in constant contact with the resident and giving updates as needed. When standby responds, they are in constant contact with the collections supervisor or crew with what is needed to fix the problem and, if help is needed to resolve the problem, the collection crew will respond to the location.

The majority of the complaints are related to stoppages. During work hours, a cleaning crew is diverted to remove the stoppage. Most of the stoppages occur in laterals. Although staff respond to all stoppage complaints, they are not responsible for clearing stoppages in laterals from the property line to the house. The City's initial response time goal is 30 minutes.

4.3.7 Maintenance Management and Work Orders

The City uses a CMMS (Computerized Maintenance Management System) program called Maintenance Connection to generate and track maintenance and work orders.

Work Orders are generated by either the public calling in or the City staff. When the collections crew is in the field, it is difficult to make a new work order, so staff communicates with administrative staff to generate a new work order for the work to be performed.

4.4 Scheduled Inspections and Condition Assessment Discussion

This section includes a description of how the City goes through with the inspections for Manholes, Pipeline, and Lift station and the Assessment of their condition.

The Wastewater Collection System Master Plan was updated in 2010 to make sure growth throughout the City does not overwhelm the sewer system. The City is looking into ways to re-route lines which are nearing proper flow capacity. Currently, the system is used efficiently. With a majority of the City's sewer system being relatively new (15 years or less), the City feels it is in a good position to manage growth.

The scope of work in the City's Wastewater Collection System Master Plan is as follows:

- Review unit flow factors, peaking factors and peaking curve;
- Review General Plan land use areas with Planning for ultimate build-out;
- Review Tributary Areas for Interceptor and Trunk sewers and plot on City GIS mapping;
- Prepare table for System-wide Flow Projections;
- Prepare tables for flow generation for each Interceptor and Trunk Sewer in the system. All figures, tables and charts use the manhole numbering in the GIS mapping system;

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

- Prepare map of the ultimate system requirements using the City's GIS mapping system. All maps and exhibits use the manhole numbering in the GIS mapping system;
- Revise input data for the Hydraulic Model;
- Revise Hydraulic Model, and run the Ultimate System under peak wet weather conditions; and
- Hydraulic Model runs focused on the Ultimate System (Build-out).

Hydraulic Analysis and Findings

- Evaluate results of Hydraulic Model Run for deficiencies, restrictions,
- Determine improvements needed for identified deficiencies; and
- Prepare tables and figures for recommended ultimate system improvements. Maps and figures to utilize the City's GIS mapping system.

Final Report

- Review and update cost estimates for all improvements needed for the ultimate system;
- Identify alternatives for relief of system flow restrictions;
- Prepare Figures on the City's Base Maps to show locations of future improvements;
- Prepare time line for construction of future improvements based on anticipated growth projections;
- Build-out ultimate population projected at 80,000 within a land area of 39,800 acres;
- Prepare Technical Memorandum Report of Findings and Recommendations.

Tables in the Final Report will include:

- Unit Wastewater Flow Factors for all Land Use Classifications;
- Flow generation values for each Interceptor and Trunk Sewer, including area, land use, and flow generation;
- Pipeline flow table for Interceptor and Trunk Sewer, including invert and rim elevations;
- Pipeline profile drawing for each Interceptor and Trunk Sewer, with plot of hydraulic grade line at ultimate development.

4.4.1 Manhole Inspection

As part of the hot spot and quadrant cleaning program, City maintenance staff visually inspect manholes for corrosion, debris or damage around the base, cracks or holes, condition of manhole steps, and also the manhole ring and lid for damage. The City understands the importance of a solid manhole inspection program. High priority manholes needing to be epoxy lined are prioritized and added to an annual CIP which rehabs 20 to 40 manholes annually.

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

All new construction projects are inspected by both a City inspector and a member of the collection staff. These inspections help the City verify the new construction is up to code and is not going to be a problem in the near future.

4.4.2 Pipeline Inspection

The City purchased a CCTV truck in January 2004 which has the capability of visually inspecting both sewer mains and sewer laterals. The City has used this truck with its formal coding system to inspect miles of sewer lines and laterals since its inception. The City is currently in the beginning stages of implementing a SSMP PREVENTIVE MAINTENANCE SCHEDULE for the CCTV truck to help with tracking the amount of footage both main and laterals the truck is completing.

Collection staff uses the CCTV truck in its Quadrant and Hot Spot cleaning program when it feels there may be an offset, belly, or any deficiency in the lines being cleaned. Also, when there is a lateral plug and crews respond, the CCTV truck is used once the line is unplugged to inspect the lines for any problems (roots, offset, belly, debris). Once the problem is identified, it is fixed by the City crew if it's the City's responsibility, or if it is the property owner's responsibility, a tape is given to the property owner showing the problem which must be fixed.

4.4.3 Pump Station Inspection and Assessment

The City has two lift stations, Sellers and Dreamcatcher, which are in excellent condition. The Sellers lift station was part of a CIP project in 2010 which completely refurbished the existing site. It was redesigned in a way so if a lift station failure occurred, the City is able to use the existing site with external pumps and generators without disrupting traffic or flows. The Dreamcatcher lift station is supplied by 20 houses at the southwest end of town. It was accepted into the City's sewer system in 2007 and is comparatively new as well.

The City inspects both lift stations daily. These daily inspections consist of a visual check of the wet wells, checking and cleaning of floats if needed, recording the hours on the meters for each pump at both stations, reading of PG&E meter numbers, checking for alarms on SCADA screen, and checking levels of wet well.

The lift stations are gone through at length every one to two years. Extensive maintenance includes cleaning out the wet well with pressure washing, use of the vacor truck to remove debris, and removing pumps for inspection and repairs if necessary.

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

4.5 Contingency Equipment and Replacement Inventories

The City maintains an equipment inventory. All sewer maintenance equipment and replacement parts are stored at the City's Corporation Yard. Equipment and replacement parts are replaced as necessary based on the estimated useful and remaining life of the product. The City's equipment inventory list is included in Appendix E.

The City keeps spare parts in inventory to minimize the sanitary sewer systems down time during a needed repair. Spare parts include manhole rings and lids, hoses, couplings, nozzle heads for maintenance and emergency response equipment, and 4, 6, and 8 inch diameter PVC spare pipe.

Pump stations and the City's trunk mains are considered to be "critical" parts of the system. Emergency equipment stored by the City for the effective response to a crisis in these areas is sewer bypass pumps, emergency backup generator, and the combination jet-vac trucks. The City finds having adequate inventory for responding to all emergencies is of the highest priority.

The City maintains an emergency trailer which can be used in the event emergency repairs to the collection system are needed. This trailer is stocked with generators, compressors, plugs, barriers, cones, etc. Public Works stand-by staff members are trained to respond to after-hours calls with the trailer, ensuring the fastest response time to overflow occurrences.

4.6 Training Discussion

The City budgets for training its sewer maintenance staff each year. The Wastewater Division has an extensive training program, and will continue to review its training program to meet the demands of maintaining the sewer system and occupational standards.

The City requires sewer staff to have their CWEA certification. Providing training opportunities to enable all sewer maintenance staff to remain certified is a goal and requirement of the City. The City assists with certification by reimbursing the employees the original test fees once the certification test is passed. As all of the City's current sewer maintenance staff is certified at the Grade II level, the current focus is on continuing education to maintain these certifications.

The City uses numerous outside programs, as well as providing in-house and on-the-job training for sewer maintenance crews. Training programs the City uses are listed below:

- CWEA
- Vendor sponsored training (i.e. Trench Plate shoring class)
- In-house training by supervisor and lead workers; and

- Safety meetings by experienced staff and/or vendors (i.e. Safety Fair).

Element 4: OPERATION AND MAINTENANCE PROGRAM (Cont.)

The City has established a cross-training program where all qualified employees of the City (must have a Class B license) have the capability of training in other departments with some monetary benefits. This training must be approved by all affected department supervisors. Once approved, the training is conducted by a qualified member of the collection staff. The trainee has the opportunity to learn all facets of the job including operating the vactor trucks, pipe and manhole cleaning and examination, lift station and hot spot check, and all tasks included in the collection crew cross-training program. To pass the cross-training, the individual must demonstrate competency in all skill sets including driving the trucks in order to get signed off as competent.

Element 5: DESIGN & CONSTRUCTION STANDARDS

This section of the SSMP discusses the City's design and construction standards. This section fulfills the Design and Performance Provisions SSMP requirements for the SWRCB (Element 5).

5.1 Regulatory Requirements for Design & Construction Standards

SWRCB Requirement: *The City must have design and construction standards and construction standards and specifications for the installation of new sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sewer systems. The City must also have procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.*

5.2 Element 5 Appendix

Supporting information for Element 5 is included in Appendix F. This appendix includes the following documents:

1. Standard Plans and Specifications, Section 71
2. Standard Plans and Specifications, Section 75
3. List of Drawings in the City's Standard Plans

5.3 Design & Construction Standards Discussion

Section 71 of the City's Standard Specifications addresses Sanitary Sewer Installation. This section includes specifications on pipe, manhole, cleanout, and sewer lateral materials and construction methods, as well as sewer line pressure testing, acceptance, and final inspection by CCTV. These requirements provide reasonable assurance sewers constructed to these specifications will perform adequately with minimal infiltration or maintenance problems and will maintain their structural integrity for the duration of their intended useful lives. The City's Standard Specifications are updated regularly to help prevent future problems in the City's sewer system.

Many of the specifications included in Section 71 of the City's Standard Specifications also apply to sewer pipeline rehabilitation and repair projects. Additional specifications related to sewer rehabilitation and repair will be added as needed when such projects are implemented by the City, or will be included in project-specific specifications.

The City owns two lift stations and does not anticipate any additional pump stations being built. Therefore, pump station plans and specifications are not included in the Standards. Design standards and construction specifications for pump stations will be developed as needed on a project-specific basis should any new pump stations or pump station rehabilitation projects be implemented.

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN

This section of the SSMP provides an overview and summary of the City's emergency response documents and procedures for sewer overflows. Standard Operating Procedures pertaining to the sewer collection system are attached in Appendix B. This section contains the Overflow Emergency Response Plan and satisfies the SWRCB (Element 6) SSMP requirements.

6.1 Regulatory Requirements for Overflow Emergency Response Plan Element

SWRCB Requirement: *The collection system agency shall develop and implement an overflow emergency response plan which identifies measures to protect public health and the environment. At a minimum, this plan must include the following:*

- A. *Proper notification procedures so the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- B. *A program to ensure appropriate response to all overflows;*
- C. *Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs which potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with the MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;*
- D. *Procedures to ensure appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;*
- E. *Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and*
- F. *A program to ensure all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

6.2 Sewer Overflow Response Plan

The Sewer Overflow Response Plan (SORP) is a stand-alone document but is included in this SSMP in its entirety for ease of reference.

I. Organization of Plan

The key elements of the SORP are addressed individually as follows:

Section I: Organization of Plan

Section II: General

A. Objectives

Section III: Overflow Response Procedure

A. Receipt of Information Regarding an SSO

B. Dispatch of Collection System Personnel to Site of Sewer Overflow

C. Overflow Correction, Containment, and Clean-Up

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

D. Sewage Overflow Report

E. Customer Satisfaction

Section IV: Public Advisory Procedure

A. Temporary Signage

B. Other Public Notification

Section V: Regulatory Agency Notification Procedure

A. Immediate Notification

B. Secondary Notification

Section VI: Maintenance of SORP

Section VII: Attachments

Attachment A Sewer Overflow Report Form

Attachment B Sewer Overflow Responding Communication Flowchart

Attachment C Overflow Descriptions and Required Notification

II. General

The SORP is designed to ensure every report of a sewage overflow incident is immediately dispatched to the appropriate City of Brentwood Wastewater Division personnel for confirmation. Quick response will minimize the effects of the overflow with respect to impacts on public health, beneficial uses and water quality of surface waters and on customer service. The SORP further includes provisions to ensure notification and reporting is made to the applicable regulatory agencies. For purposes of this SORP, “confirmed sewage spill” is also sometimes referred to as “sewer overflow,” “overflow,” or “SSO.”

A. Objectives

The primary objectives of the SORP is to protect public health and the environment, and to satisfy regulatory agencies and waste discharge permit conditions which address procedures for managing sewer overflows, and minimize risk of enforcement actions against the City of Brentwood.

Additional objectives of the SORP are as follows:

- Protect collection system personnel and the wastewater treatment plant;*
- Protect the collection system, wastewater treatment facilities, and all appurtenances; and*
- Protect private and public property beyond the collection and treatment facilities.*

III. Overflow Response Procedure

The Overflow Response Procedure presents a strategy for the City of Brentwood Wastewater Division to mobilize labor, materials, tools, and equipment to correct or repair any condition, which may cause or contribute to an unpermitted discharge. The plan considers a wide range of potential system failures which could create an overflow to surface waters, land, or buildings.

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

A. Receipt of Information Regarding an SSO

An overflow may be detected by City of Brentwood employees, or by members of the public. The City of Brentwood is responsible to act based on received phone calls or reports on possible sewage overflow from the wastewater collection system, and to provide immediate response to investigate and/or correct reported sewer overflow.

Generally, telephone calls from the public reporting possible sewer overflows are received at the Public Works offices.

- 1. The personnel receiving the phone call obtains all relevant information available regarding the overflow including:
 - a. Time and date call was received;*
 - b. Specific location;*
 - c. Description of problem;*
 - d. Time possible overflow was noticed by the caller;*
 - e. Caller's name and phone number;*
 - f. Observations of the caller; and*
 - g. Other relevant information which will enable Wastewater Division personnel to quickly locate, assess, and stop the overflow.**

This information should be recorded on the Sewer Overflow Report form.

- 2. The City of Brentwood Wastewater Division dispatches collection system personnel to confirm the overflow. Until verified, the report of a possible spill will not be referred to as a "sewer overflow."*

The City of Brentwood Wastewater Division completes the Sewage Overflow Report (Attachment A) within 24 hours of the sewer overflow confirmation and provides the information to the proper Regulatory Agencies as detailed in Section V.

B. Dispatch of Collection System Personnel to Site of Sewer Overflow

Failure of any element within the wastewater collection system which threatens to cause or causes an SSO must trigger an immediate response to isolate and correct the problem. Personnel and equipment must be available to respond to any SSO locations. Additional personnel will be "on call" in the event extra manpower is needed.

- 1. Dispatching Collection System Personnel: When the City of Brentwood receives notification of a potential sewer overflow outlined in Section III.A., the Wastewater Division dispatches maintenance personnel with appropriate resources as required.*

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

2. *Collection System Personnel Instructions: All personnel dispatched to the site of an SSO will proceed immediately to the site of the overflow and immediately report any delays or conflicts in assignments for resolution.*

In all cases responding personnel will report their findings, including possible damage to private and public property, to the Wastewater Operations Manager as soon as practical upon making their investigation.

3. *Additional Resources: The City of Brentwood Wastewater Operations Manager receives and conveys to appropriate parties requests for additional personnel, material, supplies, and equipment for personnel working at the site of a sewer overflow.*
4. *Preliminary Assessment of Damage to Private and Public Property: City of Brentwood personnel shall use discretion in their actions as reasonably as they can. They must be aware the City of Brentwood could face increased liability for any further damages inflicted to private property during such assistance. City of Brentwood personnel shall not enter private property for purposes of assessing damage unless authorized by the Wastewater Operations Manager. City of Brentwood personnel shall take appropriate photographs for filing with the Overflow Report.*
5. *Field Supervision and Inspection: The Senior Collection System Worker visits the site of the sewer overflow to ensure the provisions of this Overflow Response Plan and other directives are met.*

C. Overflow Correction, Containment, and Clean-Up

This section describes specific actions to be performed by Wastewater Division personnel during an SSO.

The objectives of these actions are:

- *To protect public health, environment, and property from sewage overflows and restore surrounding area back to normal as soon as possible;*
- *To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);*
- *To promptly notify appropriate regulatory agencies with preliminary overflow information and potential impacts;*

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

- *To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters; and*
- *To minimize the City of Brentwood's exposure to any regulatory agency penalties and fines.*

Under most circumstances, the City of Brentwood can handle all response actions with its own personnel. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.

Circumstances may arise when the City of Brentwood could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering should excavation be required. The City of Brentwood may also choose to use private contractors for open excavation operations which might exceed one day to complete.

1. *Responsibilities of City of Brentwood Personnel Upon Arrival: It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the maximum extent possible. Should the overflow not be the responsibility of the City of Brentwood, but there is imminent danger to public health, public or private property, or to the quality of waters of the state, then City personnel will take prudent emergency action until the responsible [party assumes responsibility and provides actions.*

Upon arrival at an SSO, Collection System personnel performs the following:

- *Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;*
- *Identifies and requests assistance or additional resources to correct the overflow or to assist in determination of its cause;*

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

- *Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, repairs pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., and overflow running off of private property into the public right-of-way); and*
 - *Requests additional personnel, materials, supplies, or equipment which will expedite and minimize the impact of the overflow.*
2. *Initial Measures for Containment: Initiate measures to contain the overflowing sewage and recover where possible, sewage which has already been discharged, minimizing impact to public health or the environment.*
- *Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of water, stream bed, etc.;*
 - *Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and*
 - *Take immediate steps to contain the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.*
3. *Additional Measures Under Potentially Prolonged Overflow Conditions: In the event of a prolonged sewer line blockage or a sewer line collapse, set up a portable bypass pumping operation around the obstruction.*
- *Take appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow.*
 - *Implement continuous or periodic monitoring of the bypass pumping operation as required.*
 - *Address regulatory agency issues in conjunction with emergency repairs.*
4. *Cleanup: Clean sewer overflow sites thoroughly after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, and rubber products) is to remain.*

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

- *Whenever possible digital photos should be taken of the area before and after the cleanup.*
- *Where practical, thoroughly flush the area and clean of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.*
- *Secure the overflow area to prevent contact by members of the public until the site has been thoroughly cleaned.*
- *Where appropriate, disinfect and deodorize the overflow site.*
- *Where sewage has resulted in ponding, pump the pond dry and dispose of the residue in accordance with applicable regulations and policies.*
- *If a ponded area contains sewage, which cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water which may contain fish or other aquatic life, do not use bleach.*

D. Sewage Overflow Report

The Sewer Overflow Report (Attachment A) contains information which is required to be reported on the California Integrated Water Quality System (CIWQS) SSO database.

The report includes the following information:

- *Determination if the sewage overflow reached surface waters, i.e., all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g. sewage residue) sewage flowed to surface waters.*
- *Determination the sewage overflow had not reached surface waters by describing conditions at the sewage overflow, which support this determination.*
- *Determination of the start time of the sewer overflow by one of the following methods:*
 - a. Date and time information received and/or reported to have begun and later substantiated by collection system personnel; and*
 - b. Visual observation.*
- *Visual observations - an estimation of the rate of sewer overflow in gallons per minute (gpm) based on the example chart contained in the emergency response binders.*

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

- *Determination of the volume of the sewer overflow.*
- *Photographs of the event, when possible.*
- *Assessment of any damage to the exterior areas of public/private property. City of Brentwood personnel shall not enter private property for purposes of estimating damage to structures, floor and wall coverings, and other personal property without authorization from management.*

E. *Customer Satisfaction*

The Wastewater Operations Manager follows up in person or by telephone with the entity who was reporting the overflow. The cause of the overflow and its resolution will be disclosed.

IV. Public Advisory Procedure

A. *Temporary Signage*

The City of Brentwood has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces resulting from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

B. *Other Public Notification*

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary, the Wastewater Operations Manager determines the need for further public notification.

V. Regulatory Agency Notification Plan

The Regulatory Agency Notification Plan establishes procedures, which the City of Brentwood follows to provide formal notice to the RWQCB as necessary in the event of an SSO.

Agency notifications will be performed in parallel with other internal notifications. Internal notification and mobilization of Collection System personnel are established in Section III – Overflow Response Procedure.

A. *Immediate Notification*

If the overflow results in a fish kill, notify the State Warning Center (formerly OES) within 2 hours of becoming aware of the discharge.

Element 6: OVERFLOW EMERGENCY RESPONSE PLAN (Cont.)

B. Secondary Notification

The Wastewater Operations Manager may contact other agencies, as necessary as well as other interested and possibly impacted parties.

IV. Maintenance of SORP

The SORP will be reviewed on an annual basis. Possible amendments can include:

- *Change in procedures.*
- *Change in personnel.*
- *Changes due to regulatory requirements.*

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

This section of the SSMP discusses the City of Brentwood's FOG control measures, including identification of problem areas, focused cleaning, and source control. This section fulfills the FOG Control requirements for both the RWQCB (Element 4) and the SWRCB (Element 7) SSMP requirements.

7.1 Regulatory Requirements for FOG Control Element

SWRCB Requirement: *The City shall evaluate its service area to determine whether a FOG control program is needed. If the City determines a FOG program is not needed, the City must provide justification for why it is not needed. If FOG is found to be a problem, the City must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:*

- A. An implementation plan and schedule for a public education outreach program promoting proper disposal of FOG;*
- B. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- C. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- D. Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;*
- E. Authority to inspect grease producing facilities, enforcement authorities, and whether the City has sufficient staff to inspect and enforce the FOG ordinance*
- F. An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and*
- G. Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in (f) above.*

7.2 Element 7 Appendix

Supporting information for Element 7 is included in Appendix C. This Appendix includes the following documents:

- 1. List of food facilities in the City of Brentwood;
- 2. Blank restaurant inspection form;
- 3. "Preventing Sewer Backups" public outreach information pamphlet; and
- 4. Residential FOG public outreach brochure.

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM (Cont.)

7.3 Summary of FOG Elements Identified by the State

State Element	City of Brentwood
An implementation plan and schedule for a public education outreach program promoting proper disposal of FOG.	Residential FOG is identified as a major SSO factor. The public outreach program promotes proper disposal of FOG. A routine inspection program is anticipated to be sufficient for restaurants once staffing is complete.
A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area.	Currently it is the business owner's responsibility to dispose of the fats, oils, and grease and keep a manifest showing who is removing the grease, and where it is being taken.
The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.	City of Brentwood Municipal Code includes adequate legal authority to prohibit discharges and to identify measures to prevent SSOs and blockages from FOG.
Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.	City of Brentwood has an ordinance, Ch.13.04 which meets this requirement.
Authority to inspect grease producing facilities, enforcement authorities, and whether the City has sufficient staff to inspect and enforce the FOG ordinance.	The City is aware of the need to add staff to accommodate this requirement. The City's FOG ordinances are in place and adequate at this time. The FOG program will continue to be updated as needed.
An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section.	Over the past several years, the City of Brentwood has identified the sections of sewer in the City which are subject to FOG and has an on-going maintenance schedule, as well as daily checks of the manholes in these areas. If any new areas with FOG concerns become apparent, they will be added to the daily rounds list.
Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in the above section.	Known sources of FOG are required to install grease control devices. This coupled with monitoring and cleaning is currently sufficient to prevent overflow.

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM (Cont.)

7.4 FOG Control Discussion

The City has determined a FOG control program is necessary per SSMP requirements. Approximately 120 food service facilities are located within City limits and discharge to the City's sewer system. City staff has noted the tendency for grease buildup in specific sewer lines. This section discusses measures the City takes to control FOG.

The City's FOG control program consists of hot spot cleaning and maintenance as well as source control. The following subsections discuss identification and cleaning of grease-prone areas, legal authority to prohibit grease discharge or require a grease removal device, facility inspection, and public outreach.

7.5 Identification and Sewer Cleaning

The core means of FOG control utilized by the City is identification of trouble spots or sewer lines which are likely prone to grease accumulation and targeted cleaning of these areas on a regularly scheduled plan.

- A. Identification of Grease Problem Areas – The City identifies potential grease problem areas by tracking locations and causes of blockages and SSOs. Also, debris type and severity are noted by maintenance crews during routine hot spot cleaning. Areas with several restaurants or grease-producing facilities are also considered likely potential grease problem areas.
- B. Hot Spot Cleaning – Approximately 7,500 feet of sewers are included in the hot spot cleaning program specifically for FOG control. Cleaning is generally done quarterly, but actual frequency depends on the history of stoppages or overflows on a line, recent inspection of lines during daily rounds, as well as areas expected to be prone to grease buildup. The City's downtown area is older and has a larger number of restaurants; therefore lines in this area are on a quarterly cleaning schedule. Daily rounds generate work (jet cleaning) for that day if slow flow, high flow, damming, or a plug is found.

The City uses schedules for each manhole to manhole reached concerning hot spot cleaning. These schedules are used as cleaning logs, on which maintenance workers note the date and time, manhole I.D. number, problems in line, and amount and type of debris found. This information is recorded in Maintenance Connection.

- C. Blockage Investigation – The City CCTV inspects each sewer following a blockage. If the source of the grease in a lateral or main can be identified, the City contacts that restaurant or source of the grease and takes appropriate action to eliminate the problems.

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM (Cont.)

7.6 Legal Authority

Legal measures available to the City to control sources of FOG include the following:

- Authority to prohibit discharges;
 - Requirement of grease removal device and cleaning log; and
 - Enforcement measures, as appropriate.
- A. Generally Prohibited Wastes – City of Brentwood Municipal Code **Title 13 Sewers in chapter 13.04.085 Generally Prohibited Wastes**
- a. No person shall discharge or cause to be discharged to a public sanitary sewer any substance or waste which contains substances or has characteristics which either alone or by interaction with other wastewaters cause or threaten to cause interference or pass-through.
 - b. No person shall discharge to any public sewer any wastes, if in the opinion of the city, those wastes may have any adverse or harmful effect on sewers, maintenance personnel or equipment, wastewater treatment personnel or equipment, treatment plant effluent quality, public or private property, aquatic life in any waters receiving effluent from sanitary sewer system, or create a hazard in the use or disposal of sewage sludge, or may otherwise endanger the public, the local environment, or create a public nuisance.
 - c. No person shall discharge or cause to be discharged to a public sewer any waste creating a stoppage, plugging, breakage, any reduction in the sewer capacity, or any other damage to sewers or sewerage facilities of the city. (Ord. 808 & 1 (part), 2005)
- B. Grease Removal Devices Required – City of Brentwood Municipal Code **Title 13 Sewers in chapter 13.04.155 Grease Removal Devices Required**
- a. Any type of business or establishment where grease or other objectionable materials may be discharged into a public or private sewage main or disposal system shall have a grease removal device of a size and design approved by the director. The requirements in this chapter are in addition to any applicable requirements of the Uniform Plumbing Code and the City of Brentwood's standard plans and specifications.
 - b. New Facilities. On or after the effective date of the ordinance codified in this chapter, food service facilities which are newly proposed or constructed, or existing facilities which will be expanded or renovated to include a food service facility, where such facility did not previously exist, shall be required to install, operate and maintain a

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM (Cont.)

grease interceptor or grease trap according to the requirements contained in this chapter. Grease interceptors or grease traps shall be installed and permitted prior to the issuance of a certificate of occupancy.

1. Grease traps shall be prohibited for new food service facilities, except for those facilities where inadequate space is available for the installation of a grease interceptor. The installation of a grease trap instead of a grease interceptor at a new food service facility must be done with the approval of the director of public works.
- c. Existing Facilities. For the purposes of sizing and installation of grease interceptors, all food service facilities existing within the city prior to the effective date of the ordinance codified in this chapter shall be permitted to operate and maintain existing grease interceptors or grease traps provided their grease interceptors or grease traps are in efficient operating condition. On or after the effective date of the ordinance codified in this chapter, the city may require an existing food service facility to install, operate and maintain a new grease interceptor or trap within ninety days of written notification by the city when any one or more of the following conditions exist:
1. The facility is found to be contributing oils and grease in quantities sufficient to cause line stoppages or necessitate increased maintenance on the wastewater collection system.
 2. The facility does not have a grease removal device.
 3. The facility has an undersized, irreparable or defective grease interceptor or trap.
 4. Remodeling of the food preparation or kitchen waste plumbing system is performed which requires a plumbing permit to be issued by the City of Brentwood.
 5. The existing facility is sold or undergoes a change of ownership.
 6. The existing facility does not have plumbing connections to a grease interceptor or trap in compliance with the requirements of this chapter.
 7. The facility fails to submit a completed application form for a grease discharge permit within sixty days after the date of the receipt of an application form by the City of Brentwood.
 8. The facility has not operated as a food service facility for twelve consecutive months prior to receiving the grease discharge permit application form.

Element 7: FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM (Cont.)

C. Illegal Sewer Uses – City of Brentwood Municipal Code **Title 13 Sewers in chapter 13.04.285 Illegal Sewer Uses**

- a. Any use of any sanitary sewer system which does not conform to the regulations established in this chapter is illegal. Within thirty days following notice by the Director of Public Works or that an illegal use exists, corrective measures to eliminate the illegal use shall be made by the owner or responsible party except in cases where extensive or exceptional repairs or replacements to existing installations are required, the city may grant extensions of time or consent to temporary remedial arrangements. (Ord. 808 & 1 (part), 2005)

7.7 Facility Inspections

The City plans to reallocate staff and hire additional staff to begin a facility inspection program. The City is aware of the areas where heavy grease is being introduced into the system. When the budget allows for an inspector, the inspector will be updated on the problem areas and will work with businesses to correct the problem areas with help from the collections crew. The FOG cleaning log will then be used to inspect lines as needed to verify for the inspector the restaurants are complying with regulations.

The City's obligation is to develop a relationship between the restaurants and the inspector. They must work together to come to accomplish the common goal of eliminating grease which is introduced to the sewer system at their location. The City will make sure the restaurants have all the information needed (Municipal Codes, etc.) to reach the common goal. A current list of food service facilities within the City is included in Appendix C.

7.8 Public Outreach

The City conducts an annual Public Works Open House where the public has the opportunity to see what the City does for the community. During this open house, staff takes the opportunity to educate the individuals attending by showing them firsthand the cleaning equipment, CCTV truck, how to avoid sewer backups at home and restaurants, as well as some educational stories which help familiarize them on what not to put in the sewer system.

The City's website <http://www.brentwoodca.gov> is another source for the public to use. The City has distributed a brochure to all residents and restaurants to help educate the public on FOG related problems and best management practices. This is all in an effort to improve Public Outreach.

Element 8: CAPACITY MANAGEMENT

This section of the SSMP discusses the City's capacity management measures, including the 2010 update of the Collection System Master Plan, and recommended capacity improvement projects. This section fulfills the Capacity Management SSMP requirements for the RWQCB (Element 8).

8.1 Regulatory Requirements for Capacity Management

SWRCB Requirement: *The wastewater collection system agency prepares and implements a capital improvement plan providing hydraulic capacity of key sewer system elements under peak flow conditions. This plan includes:*

- a. Evaluation: The agency identifies actions needed to evaluate those portions of the sewer system experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation provides estimates of peak flows, estimates of the capacity of key system components, hydraulic deficiencies, and the major sources which contribute to the peak flows associated with overflow events.*
- b. Design Criteria: The agency identifies and establishes appropriate design criteria.*
- c. Capacity Enhancement Measures: The agency identifies the steps needed to establish a short- and long-term capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP includes an implementation schedule and identifies sources of funding.*
- d. Schedule: The agency develops a schedule of completion dates for all portions of the CIP developed in (a) through (c) above. This schedule is reviewed and updated at least every five years.*

8.2 Capacity Evaluation Discussion

A Wastewater Collection System Master Plan was prepared for the City in 2001 following adoption of the 2001 City of Brentwood General Plan Update of the General Plan adopted in 1993. The Wastewater Collection System Master Plan was updated in 2006 to evaluate the areas of development and forecast wastewater system flow conditions with build-out occurring in the year 2021, and again in 2010.

The capacity assessment completed in 2006 was reviewed by City staff, and updated further to be integrated into the City's Sewer System Base Maps, with identification of the capacity and flow rates in each of the City's Interceptor and Trunk Sewers. The capacity assessment completed as part of the City's Sewer Master Plan Update was based on hydraulic modeling of the collection system with future design flows. The 2010 update identified nine CIP projects which are necessary to upgrade or expand the

Element 8: CAPACITY MANAGEMENT (Cont.)

sewer collection system. The following sub-sections provide a brief summary of the modeled system, flow estimates, and evaluation criteria used for the City's sewer system capacity evaluation.

The City has not experienced any sanitary sewer overflows caused by hydraulic deficiencies in the sewer system. Likewise, modeling of the sewer system conducted during preparation of the 2010 Collection System Analysis Update showed no overflow due to hydraulic deficiencies.

8.2.1 Hydraulic Model

Hydraulic modeling of the wastewater collection system was performed for the 2006 Update using the H₂OMap Sewer computer software. The hydraulic model update of the wastewater system was based on the 2006 hydraulic model, and analyzed the wastewater system conditions through the use of City maps, available as-built drawings and aerial imagery.

A City staff review of the 2006 update capacity assessment found discrepancies with respect to flows and tributary areas significant enough to warrant revising the model and re-analyzing the improvement recommendations for completion of the master plan. The unit flow and peaking factors the 2006 Plan used for dry weather factors were very high compared to actual flows measured at the Treatment Plant, indicating lower dry weather factors are more appropriate for city-wide planning. Significant discrepancies between the Update report description of the design flows and actual model configuration found the need for more accurate flow loadings supported by geographic and existing system information.

A new hydraulic model was created in 2009 to correct trunk and interceptor sewer pipeline system discrepancies, eliminate small pipe diameter pipes from the network, correct odd changes in pipe diameters, and correct adverse pipe slopes. The 2010 Update developed system improvements based on the City's Design Criteria for designing new pipes and improvements for new developments instead of analyzing the system for operation under normal conditions of pipes flowing full, or analyzing for minor surcharges in the system.

Flow generation factors and peaking factors for Peak Dry Weather and Peak Wet Weather flows were developed based on recorded flows at the Wastewater Treatment Plant, and the water usage information generated for the Water System Master Plan prepared for the City in 2010.

Element 8: CAPACITY MANAGEMENT (Cont.)

8.2.2 Flow Estimates

Future flows were estimated based on the City's General Plan 2001-2021. Flows were estimated based on a combination of land use and land use flow factors adjusted based on comparisons to flow monitoring and water use data developed for the 2010 Water System Master Plan.

8.2.3 Capacity Evaluation Criteria

The capacity evaluation criteria used in the Master Plan are summarized below.

Flow Criteria. System capacity was evaluated under future peak wet weather flows. Wet weather flow monitoring from pumping records at the Wastewater Treatment Plant provide information needed to develop the factors for Peak Dry Weather Flow, and Peak Wet weather Flow plus inflow and infiltration.

Gravity Pipe Criteria. A pipe was considered to be deficient in capacity if the hydraulic model predicted it would surcharge during peak wet weather flow conditions with a flow greater than the capacity of the pipe. Pipes surcharged due to backwater were not considered to be deficient in capacity.

8.2.4 Capacity Evaluation Results

Further analysis of capacity limitations as future development occurs will include options for installing parallel sewer mains, installing connections to relief sewers, and main replacement with larger diameter pipe. These improvements will be evaluated with each new development proposal.

Gravity Pipe Capacity Limitations Reaches of gravity pipe were identified as needing additional monitoring and evaluation along Balfour Road, San Jose Avenue and Lone Tree Way. No surcharging of the system under current conditions has been identified.

Pump Station Evaluations The Sellers Avenue Lift Station on the east side of the City was recently upgraded with new pumps and controls with sufficient capacity to serve its tributary area including future growth. A second lift station at the end of Pacific Grove Court serves a limited area in a small neighborhood of approximately 24 lots in a new subdivision.

8.3 Recommended Capacity Projects

This section discusses criteria used to size replacement pipes and summarizes the recommended capacity improvement projects.

Element 8: CAPACITY MANAGEMENT (Cont.)

8.3.1 Design Criteria

The design criteria for the City's sanitary sewer system are described in the "Engineering Procedures Manual for Public and Private Development Projects." The minimum size for any public sewer is eight (8) inches. Sewer mains up to twelve (12) inches in diameter are designed to carry the design flow at fifty percent (50%) of the pipe capacity. Pipes larger than twelve (12) inches in diameter are designed to carry the design flow at seventy five percent (75%) of their capacity. Design capacities for trunk (and interceptor) sewers larger than twelve (12) inches in diameter require approval by the City Engineer.

8.3.2 Recommended Capacity Improvements

Recommended improvements will be developed from the Collection System Master Plan Update being prepared by City staff with the assistance of an outside consultant to run the sewer system model software program. Deficiencies at ultimate build out development of the City will be identified for construction as new areas of service are added to the collection system.

8.4 Capital Improvement Program Schedule

The Capital Improvement Program (CIP) schedule is identified annually in the City's 5-year Capital Improvement Program Budget. Projects are added to this schedule as needed.

8.5 Financial and Economic Analysis

Funding for the CIP is provided in the City's 5-year CIP Budget, and includes development fees, and enterprise funds from user fees collected for operation of the City's wastewater system. Projects identified for funding in the 5-year CIP are identified in the "Wastewater Improvements" section of the Program. Capital improvements for the wastewater collection system are financed on a pay-as-you-go basis.

Element 9: MONITORING, MEASUREMENT, & PROGRAM MODIFICATION

This section of the SSMP discusses parameters the City tracks to monitor the success of the SSMP and how the City plans to keep the SSMP current. This section fulfills the SWRCB (Element 9) SSMP requirement.

9.1 Regulatory Requirements for Monitoring, Measurement, & Program Modifications

SWRCB Requirement: *The City shall:*

- *Maintain relevant information which can be used to establish and prioritize appropriate SSMP activities;*
- *Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- *Assess the success of the preventative maintenance program;*
- *Update program elements, as appropriate, based on monitoring or performance evaluations; and*
- *Identify and illustrate SSO trends, including: frequency, location, and volume.*

9.2 Element 9 Appendix

Supporting information for Element 9 is included in Appendix G. This appendix includes the following documents:

1. Element 9: SSMP Preventive Maintenance Schedule Sheet

9.3 Monitoring and Measurement Discussion

The City tracks several performance measures through tracking logs, including, cause and location of stoppages; cause, location, and volume of SSOs; response time; number of and reason for customer complaints; length of pipe cleaned and type of debris found. The City plans to continue tracking all performance measures currently being tracked.

Table 9-1 lists each SSMP element, the overall purpose of the SSMP element, and the specific parameters the City plans to track which will help in evaluating the effectiveness of the SSMP.

9.4 SSMP Modifications

The SSMP needs to be updated periodically to maintain current information, and programs need to be enhanced or modified if they are determined to be less effective than needed. The City will review the successes and needed improvements of the SSMP as part of the SSMP biennial audit, described in Element 10.

City staff will update critical information, such as contact numbers and the SSO response chain of communication, as needed. A comprehensive SSMP update will occur every 5 years, as required by the SWRCB.

Element 10: SSMP AUDIT

This section of the SSMP discusses the City's SSMP auditing program. This section fulfills the SWRCB (Element 10) SSMP Audit requirements.

10.1 Regulatory Requirements for SSMP Audits

SWRCB Requirement: *The City shall conduct periodic internal audits appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.*

10.2 Element 10 Appendix

Complete SSMP Audits will be stored in Appendix H.

10.3 SSMP Audit Discussion

The City will complete audits of the SSMP every other year, by March 15. The audit will focus on evaluating the effectiveness of the SSMP and compliance with the SSMP requirements.

Element 11: COMMUNICATION PROGRAM

This section of the SSMP discusses the City's communications with the public. This section fulfills the Communication Program requirement for the SWRCB (Element 11).

11.1 Regulatory Requirements for Communication Program

SWRCB Requirement: *The City shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the City as the program is developed and implemented.*

11.2 Communication Program Discussion

The City maintains a website, <http://www.brentwoodca.gov>, to help inform the public about City activities. The City's website is an effective communication channel for providing information to the public. The main page of the website provides important announcements, agendas and past meeting information from City Council meetings, as well as information regarding FOG, lateral maintenance, and a link to the Association of Bay Area Governments ("ABAG") Sewer Smart Program, <http://www.sewersmart.org>, to help the public understand how to properly use their sewer connection.

APPENDIX A

Names of Authorized Representatives w/ title and phone numbers

City Manager – (925) 516-5440
Paul Eldredge

Director of Public Works/City Engineer – (925) 516-5420
Bailey Grewal

Assistant Director Public Works/Engineering – (925) 516-5420
Miki Tsubota

Assistant Director of Public Works/Operations – (925) 516-6000
Chris Ehlers

Wastewater Operations Manager – (925) 516-6060
Casey Wichert

Senior Collection System Worker – (925) 516-6060
Chris Ziemann

City of Brentwood Police Department – (925) 634-6911
Police Department Dispatch – (925) 778-2441

City Stand-by – (925) 382-4157
Rotating On-Call Staff

Collection Staff – (925) 516-6060
Gary Krehbiel
Rusty Sims

APPENDIX B



**Public Works Department
Sewer Overflow Report**

FOR OFFICE USE

DATE:_____ CALL RECEIVED:_____AM/PM
RECEIVED BY:_____ CALLER'S NAME:_____
CALLER'S ADDRESS:_____
LOCATION OF OVERFLOW:_____ CROSS ST:_____
TIME & NAMES OF CREW MEMBERS DISPATCHED:_____
DESCRIPTION OF COMPLAINT:_____

FIELD REPORT (FOR RESPONSE CREW USE)

TIMED ARRIVED AT SITE:_____AM/PM CREW:_____
TIME OVERFLOW STOPPED:_____AM/PM DURATION OF OVERFLOW_____
PRIVATE LATERAL SPILL: YES___ NO___
MH#_____ SIZE OF LINE:_____ LENGTH OF LINE:_____
ARE THESE ESTIMATES: YES___ NO___
FINDINGS/CAUSE OF PROBLEM:_____

COMPLETE REMAINDER OF FORM IF AN OVERFLOW OCCURRED

DESCRIBE CAUSE OF OVERFLOW : _____

DESCRIBE CLEANUP METHOD : _____

DESCRIBE HOW OVERFLOW QUANTITY WAS CALCULATED (SEE ATTACHMENT) :

REACHED CREEKS OR WATER WAYS? YES____ NO____

DID IT REACH THE STORM DRAINS? YES____ NO____

LOCATION:_____

TYPE OF PROBLEM:_____

PICTURES TAKEN: YES____ NO____

SAMPLES TAKEN: YES____ NO____

SAMPLES TAKEN BY:_____ LOCATION OF SAMPLES:_____

DESCRIBE PROPERTY DAMAGE AND AFFECTED AREA:_____

SIGNS POSTED: YES___ NO___ BARRICADED: YES___ NO___

NOTIFY NEIGHBORS: YES___ NO___

CATEGORY 1 (1000 GALLONS OR MORE) YES___ NO___

IF A CATEGORY 1 CONTACT SUPERVISOR OR MANAGER IMMEDIATELY

CATEGORY 2 (LESS THAN 1000 GALLONS) YES___ NO___

REGULATORY AGENCIES NOTIFIED:

OES YES___ NO___ DATE/TIME_____ SPILL #_____

RWQCB YES___ NO___ DATE/TIME_____

COUNTY HEALTH YES___ NO___

CONTACTS/DETAILS:_____

FOLLOWUP MEASURES:_____

WORK ORDER NO:_____

FREQUENCY OF EXISTING PM PROGRAM:_____

LAST DATE PM PERFORMED:_____

RECOMMENDATIONS ON HOW TO ELIMINATE FUTURE PROBLEMS:_____

REPORT COMPLETED BY:_____DATE:_____

SKETCH OF AREA: INCLUDE MANHOLES, INTERSECTIONS, LOCATION OF STOPPAGE, ETC.



City of San Diego
Metropolitan Wastewater Department

**Reference Sheet for Estimating Sewer Spills
from Overflowing Sewer Manholes**
All estimates are calculated in gallons per minute (gpm)



5 gpm



100 gpm



225 gpm



25 gpm



150 gpm



250 gpm



Wastewater Collection Division
(619) 654-4160



50 gpm



200 gpm



275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: SEWER LATERAL PLUG	SOP No: WW-CL-001	Date: July 19, 2006
	Page 1 of 1	

SCOPE

This SOP was developed to clearly define City procedures for unplugging a sewer lateral plug, In order to restore service in the City's right-of-way (the area between the property line and the sanitary sewer main line) once a sewer later plug has been identified.

PROCEDURE

- Determine the sewer plug is located between the property line and the main line.
- Prepare truck for cleaning of plug if it is the City's responsibility by:
 - Removing the leader hose and installing the goose egg cleanup nozzle on end of jetter hose; and
 - Prepare vac tube for any overflow.
- Remove clean out cap and insert the jetter hose.
- Push the hose (not under pressure) until the plug is hit and try to push through the plug.
- Turn water pressure on at idol if the plug does not brake and/or to clean the pipe after the plug has broke.
- If water pressure starts to back-up the sewer at any time – STOP – and vac out the water and begin again.
- Replace cap and lid after everything is complete.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

Any non-typical sewer plug situation. Staff must use their best judgment to decide whether or not the above procedures will be effective in unplugging a sewer lateral.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: SEWER MAIN PLUG	SOP No: WW-CL-002	Date: Sept. 11, 2006
	Page 7 of 201	

SCOPE

This “Emergency Spill Response Procedure” was developed to meet the requirements of the State of California Water Boards Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This SOP is to be followed when an overflow of sewage has been reported or identified based on the following definition:

Sanitary Sewer Overflow (SSO) – any overflow, spill, release, discharge or diversion of untreated or partially untreated wastewater from a sanitary sewer system. SSO’s include:

- i. Overflows or releases of untreated or partially treated wastewater reaching the waters of the United States; and
- ii. Overflows or releases of untreated or partially untreated wastewater not reaching the waters of the United States; and
- iii. Wastewater backups into buildings and on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

To ensure the City of Brentwood’s Wastewater Treatment Plant consistently meets the requirements with Section D 13 (vi) of State of California Water Boards Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This SOP will provide the guidance to ensure any SSO is properly identified, mitigated and cleaned up in a manner which does not cause further impact to environment. The following procedures will be adhered to at all times. At no time will an employee(s) safety be jeopardized and/or will an employee(s) take undue risks to meet the requirements of this procedure.

PROCEDURE

- Assess the problem.
- Place sand bags to stop any sewage from entering storm drains or water ways.
- Detour all public traffic around SSO.
- Determine flow direction of the main.
- To determine where to set up find where the last manhole downstream which is plugged. Then set up on the next manhole downstream.
- Set up traffic control to accommodate the traffic around the sewer manhole.
- Set up combo truck to send the jetter hose up stream to unplug the pipe.
- Be prepared to retrieve any large debris which may come down the line and cause a plug downstream.
- After the plug is broken, turn the water off until surcharge has slowed down.
- Continue to jet clean the sewer main in the area of the plug.
- Clean up any overflow which occurs by washing and vacuuming the contaminated areas.
- Report all SSO’s to the State within 24 hours.

Any abnormal conditions should be noted in the Work Order and direct contact made with the Manager/Supervisor as soon as SSO is mitigated. Contact information is found in the Stand-by Binder.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

In case there is a situation requiring supervisory direction of any task which cannot be completed as noted or during the completion of any task an anomaly arises outside the expected result contact should be made with the following for direction:

Wastewater On-Call Licensed Duty Roster

Chris Ziemann, Sr. Collections System Worker

Office: 925.516.6085

Nextel Mobile: 925.382.4746

Radio Number: #96

Gary Krehbiel, Collections System Worker II

Office: 925.516.6060

Nextel Mobile: 925.382.6247

Radio Number: #106

Casey Wichert, Wastewater Operations Manager

Office: 925.516.6070

Nextel Mobile: 925.382.6621

Radio Number: #97

If unable to contact the above personnel, please utilize the call-out list located in the City of Brentwood's Standby Staff Emergency Binder.

ALTERNATE AGENCIES

Roto Rooter: Brentwood – 925.634.1108 or 1-800-GET-ROTO

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: OVERFLOW EMERGENCY RESPONSE CONTACT	SOP No: WW-CL-003	Date: January 2011
	Page 9 of 201	

SCOPE

This “Emergency Spill Response Procedure” was developed to meet the requirements of the State of California Water Boards Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This SOP is to be followed when an overflow of sewage has been reported or identified based of the following definition:

Sanitary Sewer Overflow (SSO) – any overflow, spill, release, discharge or diversion of untreated or partially untreated wastewater from a sanitary sewer system. SSO’s include:

- iv. Overflows or releases of untreated or partially treated wastewater reaching the waters of the United States; and
- v. Overflows or releases of untreated or partially untreated wastewater not reaching the waters of the United States; and
- vi. Wastewater backups into buildings and on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

To ensure the City of Brentwood’s Wastewater Treatment Plant consistently meets the requirements with Section D 13 (vi) of State of California Water Boards Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This SOP will provide the guidance to ensure any SSO is properly identified, mitigated and cleaned up in a manner which does not cause further impact to environment. The following procedures will be adhered to at all times. At no time will an employee(s) safety be jeopardized and/or will an employee(s) take undue risks to meet the requirements of this procedure.

PROCEDURE

NORMAL WORKING HOURS

- 1) All reports of spills should be directed to the Wastewater Main Line 925.516.6060.
- 2) The following information should be recorded:
 - a. Name, Phone Number
 - b. Time Received Call
 - c. Address of Spill
 - d. Commercial/ Residential
 - e. Actively Over Flowing
- 3) If unable to reach anyone at the Wastewater Main Line, call 925.516.6000.
- 4) Mitigate spill by Sand Bagging/ plugging Strom Drain System.
- 5) Protect Area from Public Contact
 - a. Barricade or close street from vehicular and walking access
 - b. Post signage when needed
- 6) Estimate size of spill.

- 7) Determine the extent of the spill by visually checking how far the spill traveled downstream from the point of the SSO.

AFTER HOURS and WEEKENDS

- 1) All reports of spills should be directed to the Public Works Standby Person at 925.382.4157.
- 2) The Standby person will record the following information:
 - a. Name, Phone Number
 - b. Time Received Call
 - c. Address of Spill
 - d. Commercial/ Residential
 - e. Actively Over Flowing
- 3) After verifying an actual SSO, the Standby person will call the Collections System personnel (see emergency binder for names and numbers) while in route to SSO.
- 4) If Collections System personnel are unavailable, Standby personnel should call Roto Rooter at 925.634.1108 or 1-800-Get-Roto.
- 5) Mitigate spill by Sand Bagging/ plugging Storm Drain System.
- 6) Protect Area from Public Contact
 - a. Barricade or close street from vehicular and walking access
 - b. Post signage when needed
- 7) Estimate size of spill.
- 8) Determine the extent of the spill by visually checking how far the spill traveled downstream from the point of the SSO.

Any abnormal conditions will need to be noted in the Work Order and direct contact made with Management/ Supervision as soon as SSO is mitigated. Contact information is found in the Stand-by Binder.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

If there is a situation requiring supervisory direction of any task which cannot be completed as noted, or during the completion of any task an anomaly arises outside the expected result, contact should be made with the following for direction:

Wastewater On-Call Licensed Duty Roster

Kris Vickers, Wastewater Treatment Plant Supervisor

Office: 925.516.6071

Nextel Mobile: 925.250.3250

Radio Number: #28

Casey Wichert, Wastewater Operations Manager

Office: 925.516.6060

Nextel Mobile: 925.382.6621

Radio Number: #97

If unable to contact the above personnel, utilize the call-out list located in the Standby Staff Emergency Binder.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: GREASE INTERCEPTOR INSPECTION	SOP No: WW-CL-004	Date: May 5, 2008
	Page 12 of 201	

SCOPE

This SOP has been created to provide a cohesive framework while performing Grease Interceptor Inspections at local Food Service Establishments (FSE's). This procedure contains many steps and should be followed as closely as possible.

Recommended Steps Prior to Inspection

Step 1 - Prioritize FSE's to be inspected

- Identify FSE's located in critical areas of the sewer collection system.
- Identify FSE's with historically poor performance.
- Evaluate inspection frequency.

Step 2 - Review the Food Service Establishment (FSE) file or, if no file, create a file for the FSE. Prepare the pre-inspection forms and associated paperwork.

- Review results of previous inspections and make copies.
- Review any recent correspondence with the FSE and make a copy of the FSE's FOG program registration packet.
- Review and make a copy of key contacts, kitchen equipment, and other information for the FSE.
- Identify where grease trap or interceptor is located at the facility.

Step 3 - Schedule the Inspection

- Review the hours of operation for the FSE.
- Identify if there is a best timeframe to inspect the Grease Interceptor.
Do not perform inspections during lunch hours 11:00 AM to 1:30 PM.

Step 4 - Ensure adequate program literature and forms

- Maintenance logs.
- General FOG program conditions or Rules and Regulations.
- Best Management Practices (BMP's).
- Inspection forms.
- Non-compliance or Notice of Violation Forms (as appropriate).
- List of approved waste haulers.

Step 5 - Ensure adequate inspection and safety equipment

- Manhole pick, rubber mallet, 5 pound sledge hammer, and pry bar.
- Ratchet set, pipe wrench, screw drivers, allen wrenches, flashlight, florescent dye, and mirror.
- Grease interceptor and grease trap monitoring device.
- Monitoring device holder, measuring tape, container to carry tools, plastic sheeting, and sample container.

- Gas detector and sulfide test kit.
- Digital camera.
- Monitoring device cleaning brushes and detergent, paper towels, hand sanitizer, tape, and bug spray.
- Safety shoes, fluorescent safety vest, gloves and knee pads.
- Safety cones and caution tape.

PROCEDURE

Step 1 - Initial FSE Contact and Safety

- Inform FSE management of intent to inspect and request attendance at inspection.
- Mobilize equipment to site.
- For safety, put on safety vest and mark off area with safety cones/delineators.

Step 2 - Visual Inspection

- Identify any problems with the lids (missing, broken, etc.).
- Remove lids, measure gas, and observe condition:
 - ✓ Inlet Tee (identify missing, broken, plugged, etc.).
 - ✓ Baffle Tee (identify missing, broken, plugged, submerged, etc.).
 - ✓ Outlet Tee (identify missing, broken, plugged, submerged, etc.).
 - ✓ Sample Box (identify FOG present, plugged, submerged, etc.).
- Document deficiencies.

Step 3 – Sample Interceptor for FOG and solids

- Visually observe the apparent thickness and condition of the FOG layer.
- Insert “sludge judge” slowly into the end portion of the chamber and remove slowly.
- After a couple of minutes, observe, measure, and document the level of floating FOG and the layer of settleable solids.
- If combined FOG and Settleable Solids layer is greater than 25% of the depth, take a picture and document the deficiency.

Step 4 – Inform FSE of Results

- Review inspection documentation to ensure it is complete and accurate.
- Review FSE maintenance log of historical cleaning and previous pumping records.
 - ✓ To ensure the FSE is maintaining the agency cleaning freq requirement (e.g. quarterly).
 - ✓ To identify any issues identified by the waste hauler (e.g. damaged tee).
 - ✓ To identify proper disposal of waste material.
- Review results of inspection with the FSE identifying deficiencies and requirements.
- If there is a timeframe for deficiencies to be corrected, ensure the FSE is informed and it is documented on the inspection paperwork.
- Request FSE representative to sign inspection record and provide FSE with a copy of the inspection record.
- Hand out notice of non-compliance or notice of violation if applicable.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

None.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: GREASE TRAP INSPECTION	SOP No: WW-CL-005	Date: May 5, 2008
	Page 15 of 201	

SCOPE

This SOP has been created to provide a cohesive framework while performing Grease Trap Inspections at local Food Service Establishments (FSE's). This procedure contains many steps and should be followed as closely as possible.

Recommended Steps Prior to Inspection

Step 1 - Prioritize FSE's to be inspected.

- Identify FSE's located in critical areas of the sewer collection system.
- Identify FSE's with historically poor performance.
- Evaluate inspection frequency.

Step 2 - Review the Food Service Establishment (FSE) file or, if no file, create a file for the FSE. Prepare the pre-inspection forms and associated paperwork.

- Review results of previous inspections and make copies.
- Review any recent correspondence with the FSE and make a copy of the FSE's FOG program registration packet.
- Review and make a copy of key contacts, kitchen equipment, and other information for the FSE.
- Identify where grease trap or interceptor is located at the facility.

Step 3 - Schedule the Inspection

- Review the hours of operation for the FSE.
- Identify if there is a best timeframe to inspect the Grease Interceptor.
Do not perform inspections during lunch hours 11:00 AM to 1:30 PM.

Step 4 - Ensure adequate program literature and forms

- Maintenance logs.
- General FOG program conditions or Rules and Regulations.
- Best Management Practices (BMP's).
- Inspection forms.
- Non-compliance or Notice of Violation Forms (as appropriate).
- List of approved waste haulers.

Step 5 - Ensure adequate inspection and safety equipment

- Manhole pick, rubber mallet, 5 pound sledge hammer, and pry bar.
- Ratchet set, pipe wrench, screw drivers, allen wrenches, flashlight, florescent dye, and mirror.
- Grease interceptor and grease trap monitoring device.
- Monitoring device holder, measuring tape, container to carry tools, plastic sheeting, and sample container.

- Gas detector and sulfide test kit.
- Digital camera.
- Monitoring device cleaning brushes and detergent, paper towels, hand sanitizer, tape, and bug spray.
- Safety shoes, fluorescent safety vest, gloves and knee pads.
- Safety cones and caution tape.

PROCEDURE

Step 1 - Initial FSE Contact and Health Concerns

- Inform FSE management of intent to inspect and request attendance at inspection.
- If grease trap is inside the facility, attempt to schedule inspection so as not to disrupt the facility operations.
- Be aware of “health” concerns during inspection.

Step 2 - Visual Inspection

- Identify visual issues with the grease trap (e.g. FOG overflowing or leaking from grease trap).
- Verify status of Flow Control Device.
- Identify any issues with the piping or connections to and from the grease trap.
- Remove cover from grease trap and observe condition.
 - ✓ Cover gasket (identify missing, broken, etc.).
 - ✓ Baffles (identify missing, broken, etc.).
 - ✓ Outlet chamber (evidence of FOG, etc.).
- Document deficiencies.

Step 3 – Sample Interceptor for FOG and solids

- Visually observe the apparent thickness and condition of the FOG layer.
- Insert “sludge judge” slowly into the end portion of the chamber and remove slowly.
- After a couple of minutes, observe, measure, and document the level of floating FOG and the layer of settleable solids.
- If combined FOG and Settleable Solids layer is greater than 25% of the depth, take a picture and document the deficiency.

Step 4 – Inform FSE of Results

- Review inspection documentation to ensure it is complete and accurate.
- Review FSE maintenance log of historical cleaning and previous pumping records.
 - ✓ To ensure the FSE is maintaining the agency cleaning freq requirement (e.g. weekly).
 - ✓ To identify any issues identified by the waste hauler (e.g. damaged tee).
 - ✓ To identify proper disposal of waste material.
- Review results of inspection with the FSE identifying deficiencies and requirements.
- If there is a timeframe for deficiencies to be corrected, ensure the FSE is informed and it is documented on the inspection paperwork.
- Request FSE representative to sign inspection record and provide FSE with a copy of the inspection record.
- Hand out notice of non-compliance or notice of violation if applicable.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

None.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: GREASE REMOVAL DEVICE INSPECTION	SOP No: WW-CL-006	Date: May 5, 2008
	Page 18 of 201	

SCOPE

This SOP has been created to provide a cohesive framework while performing Grease Removal Device Inspections at local Food Service Establishments (FSE's). This procedure contains many steps and should be followed as closely as possible.

Recommended Steps Prior to Inspection

Step 1 - Prioritize FSE's to be inspected

- Identify FSE's located in critical areas of the sewer collection system.
- Identify FSE's with historically poor performance.
- Evaluate inspection frequency.

Step 2 - Review the Food Service Establishment (FSE) file or, if no file, create a file for the FSE. Prepare the pre-inspection forms and associated paperwork.

- Review results of previous inspections and make copies.
- Review any recent correspondence with the FSE and make a copy of the FSE's FOG program registration packet.
- Review and make a copy of key contacts, kitchen equipment, and other information for the FSE.
- Identify where grease trap or interceptor is located at the facility.

Step 3 - Schedule the Inspection

- Review the hours of operation for the FSE.
- Identify if there is a best timeframe to inspect the Grease Interceptor.
Do not perform inspections during lunch hours 11:00 AM to 1:30 PM.

Step 4 - Ensure adequate program literature and forms

- Maintenance logs.
- General FOG program conditions or Rules and Regulations.
- Best Management Practices (BMP's).
- Inspection forms.
- Non-compliance or Notice of Violation Forms (as appropriate).
- List of approved waste haulers.

Step 5 - Ensure adequate inspection and safety equipment

- Manhole pick, rubber mallet, 5 pound sledge hammer, and pry bar.
- Ratchet set, pipe wrench, screw drivers, allen wrenches, flashlight, florescent dye, and mirror.
- Grease interceptor and grease trap monitoring device.
- Monitoring device holder, measuring tape, container to carry tools, plastic sheeting, and sample container.

- Gas detector and sulfide test kit.
- Digital camera.
- Monitoring device cleaning brushes and detergent, paper towels, hand sanitizer, tape, and bug spray.
- Safety shoes, fluorescent safety vest, gloves and knee pads.
- Safety cones and caution tape.

PROCEDURE

Step 1 - Initial FSE Contact and Health Concerns

- Inform FSE management of intent to inspect and request attendance at inspection.
- If grease removal device is inside the facility, attempt to schedule inspection so as not to disrupt the facility operations.
- Be aware of “health” concerns during inspection.

Step 2 - Visual Inspection

- Verify proper operation of the FOG removal device (components functioning correctly, wiper blades not worn down, etc.).
- Verify solids basket is properly maintained.
- Identify visual issues with the device (e.g. FOG overflowing or leaking from device).
- Verify status of Flow Control Device.
- Identify any issues with the piping or connections to and from the device.
- Remove cover from device and observe condition.
- Document deficiencies.

Step 3 – Inform FSE of Results

- Review inspection documentation to ensure it is complete and accurate.
- Review FSE maintenance log of historical cleaning and maintenance.
 - ✓ To ensure the FSE is maintaining the agency cleaning freq requirement (e.g. weekly).
 - ✓ To identify proper disposal of waste material.
- Review results of inspection with the FSE identifying deficiencies and requirements.
- If there is a timeframe for deficiencies to be corrected, ensure the FSE is informed and it is documented on the inspection paperwork.
- Request FSE representative to sign inspection record and provide FSE with a copy of the inspection record.
- Hand out notice of non-compliance or notice of violation if applicable.

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

None.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: SELLERS LIFT STATION FAILURE	SOP No: WW-CL-007	Date: February 24, 2011
	Page 21 of 201	

SCOPE

To determine why and restore service when there has been a Lift Station Failure and take the proper steps to ensure the Lift Station is repaired as soon as possible. Staff must take all appropriate measures to eliminate any possibility of Lift Station overflowing. If an overflow does occur staff should immediately refer to SOP WW-CL-002 for overflow emergency response.

PROCEDURE

- Staff responds to SCADA alarm at Sellers Lift Station and verifies the Lift Station is not working and is inoperable.
- Contact Wastewater Manager and Supervisor to notify them of the situation.
- Once the Lift Station is found to be inoperable and cannot be reset or restarted due to power failure, pump failure, etc. staff must begin implementing our by-pass procedure for the Sellers Lift Station as follows:
 1. Go to Corporation Yard to get needed by-pass pumping equipment.
 2. Hook 5934 (4" Godwin trailer mounted pump) to a pick up.
 3. Gather all necessary hoses needed for by-passing lift station.
 4. Meet back out at Sellers Lift Station.
 5. Begin assembling hoses.
 6. Set up pump outside of the fenced in area to give room for working on Lift Station problem.
 7. Put intake hoses in the upstream manhole (south end of Lift Station in drive way) and outflow in the downstream manhole (north end of Lift Station in driveway).
 8. Turn pump on to begin pump down process.
 9. Constantly monitor Sellers Lift Station wet well to make sure pump is keeping up with incoming flow.
- Once by-pass is complete, immediately begin working on finding the problem and fixing the issue.
- Call City Electrician's (Dennis Muzzy 382-9260 or Jeff Crawley 382-4951) for help if problem is electrical or if they can be of assistance.
- Continue monitoring Lift Station until Lift Station is operating sufficiently with no alarms.

Material

1. Proper Personal Protective Equipment (PPE).
2. Nextel.
3. Emergency Binder.

Equipment

1. 5934 4" Godwin trailer mounted pump.
2. 40' feet of suction hose.
3. 60' feet of discharge hose.
4. 1 4" screen.
5. Extra fuel for pump.
6. 5681 trailer mounted generator w/ lights for night time work.

Wastewater On-Call Licensed Duty Roster

Chris Ziemann, Sr. Collections System Worker

Office: 925.516.6085

Nextel Mobile: 925.382.4746

Radio Number: #96

Gary Krehbiel, Collections System Worker II

Office: 925.516.6060

Nextel Mobile: 925.382.6247

Radio Number: #106

Casey Wichert, Wastewater Operations Manager

Office: 925.516.6070

Nextel Mobile: 925.382.6621

Radio Number: #97

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

None.

PUBLIC WORKS OPERATIONS STANDARD OPERATING PROCEDURES

Subject: DREAMCATCHER LIFT STATION FAILURE	SOP No: WW-CL-008	Date: February 24, 2011
	Page 23 of 201	

SCOPE

To determine why and restore service when there has been a Lift Station Failure and take the proper steps to ensure the Lift Station is repaired as soon as possible. Staff must take all appropriate measures to eliminate any possibility of the Lift Station overflowing. If an overflow does occur staff should immediately refer to SOP WW-CL-002 for overflow emergency response.

PROCEDURE

- Staff responds to SCADA alarm at Dreamcatcher Lift Station and verifies the Lift Station is not working and is inoperable.
- Contact Wastewater Manager and Supervisor to notify them of the situation.
- Once the Lift Station is found to be inoperable and cannot be reset or restarted due to power failure, pump failure, etc. staff must begin implementing our by-pass procedure for the Dreamcatcher Lift Station as follows:
 10. Go to Corporation Yard to get needed equipment.
 11. Bring Aqua-Tech out to vacuum out wet well.
 12. While monitoring the level of the wet well, place suction tubes into Lift Station.
 13. Vacuum down the wet well until the Aqua-Tech needs to be emptied.
 14. Use the manhole in the intersection of Spyglass Drive and Pacific Grove Court to drain truck into sewer main and return to Lift Station.
 15. Continue this process until the Lift Station is emptied.
- Once wet well is drained, immediately begin working on finding the problem and fixing the issue.
- Call City Electrician's (Dennis Muzzy 382-9260 or Jeff Crawley 382-4951) for help if problem is electrical or if they can be of assistance.
- Continue monitoring Lift Station until Lift Station is operating sufficiently with no alarms.

Material

4. Proper Personal Protective Equipment (PPE).
5. Nextel.
6. Emergency Binder.

Equipment

7. 5916 Aqua-Tech.
8. 5929 Pick-up for tools.

Wastewater On-Call Licensed Duty Roster

Chris Ziemann, Sr. Collections System Worker

Office: 925.516.6085

Nextel Mobile: 925.382.4746

Radio Number: #96

Gary Krehbiel, Collections System Worker II

Office: 925.516.6060

Nextel Mobile: 925.382.6247

Radio Number: #106

Casey Wichert, Wastewater Operations Manager

Office: 925.516.6070

Nextel Mobile: 925.382.6621

Radio Number: #97

SAFETY/SECURITY

None.

APPARATUS and MATERIALS

None.

REFERENCE

None.

RECORDS

None.

EXCEPTIONS

None.

APPENDIX C

LIST OF EATING ESTABLISHMENTS FOR FOG & STORM WATER INSPECTION

SIC Code 5812001

Account	Firm Name	Street #	Suite #	Firm Address	Priority	Grease Trap	Grease Interceptor	Tallow Bin	Est. MH
021102	M. Balfour Inc. Dba: Mc Donald's	2351		Balfour Rd	High				2
022381	The Pasta Cucina	3120		Balfour Rd	High				2
010900	Subway Sandwiches -- T C B Y	4431	E	Balfour Rd	High				2
022971	Taco Delmar	3101		Balfour Rd.	High				2
023489	Chapala Mexican Restaurant	3130	E	Balfour Rd.	High		X	X	2
019177	Panda Express #950	3140	A	Balfour Rd.	High		X	X	2
019169	Starbucks Coffee #6738	3150	A	Balfour Rd.	High				2
023301	Bagel Street Cafe	3181	A	Balfour Rd.	High				2
016043	Aladino's Pizza, Inc.	4411	A	Balfour Rd.	High				2
015653	Panama Bay Coffee Co.	4431		Balfour Rd.	High				2
020344	Papa Johns Pizza	4550	E	Balfour Rd.	High				2
015298	Mc Donald's	7455		Brentwood Blvd	High				2
010955	El Camino Resturant	6611		Brentwood Blvd.	High	X		X	2
019529	La Tea Da	6675	B	Brentwood Blvd.	High				2
023013	Loards Ice Cream Of Brentwood	7760	C	Brentwood Blvd.	High				2
022168	Starbucks Coffee #13216	7760		Brentwood Blvd.	High				2
010713	KFC/AW - Harman Brentwood Inc	7810		Brentwood Blvd.	High				2
010315	Taco Bell 3437	7814		Brentwood Blvd.	High				2
020527	Canton Garden	7840		Brentwood Blvd.	High	X			2
017827	Cafeteria Diaz	7856		Brentwood Blvd.	High				2
004438	Birrieria Diaz	7876		Brentwood Blvd.	High				2
020467	Tailgaters Sports Bar & Grill	8065	6	Brentwood Blvd.	High	X		X	2
010810	Chef Chen Restaurant	8065	9	Brentwood Blvd.	High	X		X	2
018241	Brentwood's Hickory Pit	8065		Brentwood Blvd.	High			X	2
019407	Silver Skillet Restaurant	8300	A	Brentwood Blvd.	High	X			2
019963	P P S I Pizza Inc.	8300		Brentwood Blvd.	High				2
021446	Sticky Chicken & Ribs	8335	C	Brentwood Blvd.	High				2
015530	Jalisco's Resturant	8335		Brentwood Blvd.	High				2
022502	Brentwood Cafe	8500		Brentwood Blvd.	High	X		X	2
010823	El Gallito Drive In	8540		Brentwood Blvd.	High	X		X	2
019330	Starbucks Coffee #5944	8610	1	Brentwood Blvd.	High				2

019389	Quizno's Sub	8610	A	Brentwood Blvd.	High				2
023463	Beyerholm Corporation	8610	F	Brentwood Blvd.	High				2
019791	China Villa Restaurant	8610	G	Brentwood Blvd.	High	X		X	2
021653	Pizza Guys	8610	H	Brentwood Blvd.	High				2
018427	Adams Cheese Steak Shop	8610		Brentwood Blvd.	High		X		2
020486	Jamba Juice #706	8630		Brentwood Blvd.	High				2
003241	Pee Wee Muldoons	8900		Brentwood Blvd.	High	X		X	2
021560	Shutters Brasserie	2013	A1	Elkins Way	High				2
022538	Jazzed Espresso Cafe	2013		Elkins Way	High				2
023643	La Huasteca Restaurant & Market	2415	201 B	Empire Ave.	High		X	X	2
021211	Brentwood Dining Inc.	613	100	First St.	High				2
016499	Gooseberry Fool	622		First St.	High				2
010563	La Fuente Mexican Resturant	642	3	First St.	High	X		X	2
010840	Grazie	642		First St.	High				2
022519	A Fine Time For Tea	655		First St.	High				2
021189	Gabby's Grind	729	C	First St.	High				2
022325	Lone Tree Thai Cuisine	5401	150	Lone Tree Way	High				2
020583	Bluefin Enterprises, Inc.	5401		Lone Tree Way	High				2
022466	Tavo's Pizzeria & Restaurant	5411	L-100	Lone Tree Way	High				2
020435	Peet's Operating Company Inc.	5411	L-130	Lone Tree Way	High				2
019823	In - N - Out Burger	5581	189	Lone Tree Way	High				2
020655	Baja Fresh Mexican Grill	5601	100	Lone Tree Way	High		X	X	2
023170	L & L Hawaiian Barbeque	5611	120	Lone Tree Way	High				2
020399	Pick Up Stix #7437	5611		Lone Tree Way	High				2
020279	Eastbay Equities Inc.	6021		Lone Tree Way	High				2
022619	Chuck E. Cheese's	6061	A	Lone Tree Way	High				2
022659	Pizza Guys #162	6271	F	Lone Tree Way	High				2
022526	Golden Dragon Buffet	6281		Lone Tree Way	High		X	X	2
023417	Harman Slingsby Inc	6371		Lone Tree Way	High				2
023233	Orbium Inc. D B A Melo's Pizza &	6580		Lone Tree Way	High				2
022798	Charley's Grilled Sub DbA Ooea	6660	1	Lone Tree Way	High				2
019653	El Taco Factory	6660	5	Lone Tree Way	High		X	X	2
020706	Dexter Dogs	6670	5	Lone Tree Way	High				2
023236	Red Rhino Ultra Sports Bar &	6670	182	Lone Tree Way	High				2
019391	Straw Hat Pizza	6680		Lone Tree Way	High				2
015528	Lone Tree Drive Inn	8383		Lone Tree Way	High				2

022333	Brentwood Star Llc	629`		Lone Tree Way	High				2
010360	Caps Oak Street Bar & Grill	144		Oak St.	High	X		X	2
019923	Sweeny's Grill	301		Oak St.	High				2
017966	Caffe Bacio	313		Oak St.	High				2
021088	La Costa Taqueria	335		Oak St.	High				2
022399	Dragon City Restaurant	71		Sand Creek Rd.	High				2
022448	Sunny's Pizza & Deli	50	30	Sand Creek Rd.	High				2
020079	Mangetsu Japanese Cuisine	50	36	Sand Creek Rd.	High	X		X	2
017275	Mia's Mexican Restaurant	71	A-H2	Sand Creek Rd.	High	X		X	2
000026	Ralph's Catering	71	C	Sand Creek Rd.	High				2
018669	Hawaiian Bar- B- Q	2300	G1	Sand Creek Rd.	High	X		X	2
019778	Lucy's Asia Bistro Inc.	2500	A	Sand Creek Rd.	High		X	X	2
020801	Strings Italian Cafe	2500	B	Sand Creek Rd.	High		X		2
021870	Quiznos	2540	A-5	Sand Creek Rd.	High				2
017230	Round Table Pizza	2540		Sand Creek Rd.	High				2
022148	Starbucks Coffee #6719	2540		Sand Creek Rd.	High				2
022455	Perko's Cafe & Grill	1135		Second St.	High				2
017484	Papa Murphy's Pizza	1145		Second St.	High				2
019905	Willy's Bagel And Blends Llc	1155	D	Second St.	High				2
015115	Togo's Eatery	1155		Second St.	High				2
020438	Mountain Mikes Pizza	1185	M	Second St.	High				2
018797	Jack In The Box Restaurant #4349	60		Technology Way	High				2
020135	Little Caesars Pizza	3940		Walnut Blvd.	High				2
023153	Willys Bagels And Blends L L C	390		West Country Club Dr.	High				2



**CITY OF BRENTWOOD
INDUSTRIAL FACILITY
STORMWATER INSPECTION REPORT**

Inspection Date

Facility name	Site address	City	Zip

Primary Contact	Title	Phone	Ext

Secondary Contact	Title	Phone	Ext

Property Owner	Address	City	Zip

City of Brentwood Business Tax #	NAIC Code	Parcel Number
HDL #		

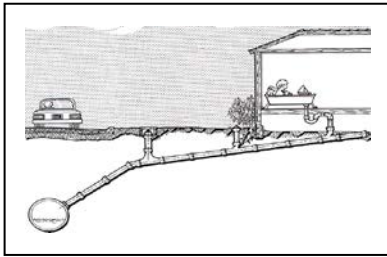
Storm Water Facility Type	Food Service	Residential	Carwash	Vehicle Service	Other
Pool Service	Gas Station	Auto Dealership	Nursery	Retail	Grocery Store

Number of Employees				Days of Operation			Hours of Operation
FTE		PT		M-F	M-S	S-S	

Type of Business Operation			
Stormwater Permit Status	YES	NO	Refer to RWQCB
1. Has facility filed NOI? If Yes, WDID# _____			
2. Does facility have a SWPPP? (If yes, answer questions 3 – 8)			
3. If Yes to above question, is the facility implementing the SWPPP?			
4. Does the facility have a signed and certified copy available on-site?			
5. Is the current SWPPP complete?			
6. Are amendments to the SWPPP clearly documented?			
7. Does the facilities SWPPP address the minimum BMP requirements?			
8. And is self monitoring being implemented?			
9. Has the facility self certified no exposure?			
10. Is the facility not covered and does not appear to need coverage?			
11. Is the facility not covered but may require coverage?			
12. Does the facility have its own NPDES permit? If so NPDES # _____			

Areas of Activity	N/A	BMP's				Pollutant Exposure	Illicit Discharge	Deficiencies / Observations Enter code for pollutant type in box/es and briefly describe visual observation					
		Any in Place		Appear Effective									
		YES	NO	YES	NO								
Indoor													
1. Floor Cleaning BMP													
2. Equipment Cleaning BMP													
3. Manufacture Residues and Spills BMP													
4. Floor drains connected to Sewer System?													
5. Proper Pretreatment device on floor drains?													
6. Spill prevention kit on site is adequate for type and size of possible spills?													
7. Spill prevention kit is located in convenient location													
Outdoors Material Storage													
1. Processing/ Mfg Areas protected from discharging contaminated run-off to drain													
2. Material storage areas are covered or protected from rain water run-off.													
3. Waste Storage/ Disposal areas covered or protected from rain water run-off													
4. Container Labeling is clear and correct?													
5. Secondary Containment of materials is adequate quantity stored?													

Areas of Activity	N/A	BMP's				Pollutant Exposure	Illicit Discharge	Deficiencies / Observations Enter code for pollutant type in box/es and briefly describe visual observation					
		Any in Place		Appear Effective									
		YES	NO	YES	NO								
Outdoors Vehicle/ Storage Area													
1. Vehicle and Heavy Equip. Storage inspected for signs of leaking oil and properly managed?													
2. Parking Areas and Access Roads for vehicle traffic is clean and free of contaminates?													
3. Equip/ Vehicle Wash Area drains to sewer system?													
4. Drainage from inside areas does not exit outside of indoors?													
5. Vehicle fuel refilling area inspected for signs of leaks or spills?													
6. is there a storm located near the fueling station?													
7. Is all of the vehicle maintenance done indoors?													
Hazardous Waste Recycling													
1. Are waste materials recycled?													
2. Are all Haz-waste handled and disposed of properly?													
3. Is process debris removed regally?													
Spill Control													
1. Are there procedures for spill response and clean-up?													
2. Are used absorbent materials removed and disposed of in a timely manner?													
3. Are employees trained in spill prevention?													



Ways to Prevent Backups in Your Sewer Lateral and in the City Main

Property owners can do many things to prevent their laterals from backing up. If everyone would be very careful about how they dispose of certain products, our system would be a much more efficient. There would be fewer backups/overflows; saving the City and homeowners the cost of correction and/or replacement.

- **Grease:** Cooking oil should be poured into a heat-resistant container and disposed in the garbage after it cools off, **not** down the drain. When the grease goes down the drain, cools off, and solidifies either in the drain, the property owner's line, or in the sewer main; the line can become constricted, and potentially clog causing a sewer overflow.
- **Paper Products:** Paper towels, diapers, and feminine products cause a great deal of problems in the property owner's lateral as well as in the City main. These products do not deteriorate quickly, unlike bathroom tissue. They become lodged in a portion of the lateral/main, causing a sewer overflow. These products should also be disposed of properly in the garbage.
- **Roots:** Shrubs and trees, seeking moisture, will make their way into sewer line cracks and connections. These roots can cause extensive damage. They may start out small, but as the tree or shrub continues to grow, so do the roots. In time, this may cause your sewer line to break, which in turn allows debris to hang up in the line on the roots, thus causing a backup. When planting greenery; place 5-7 feet from your sewer line to help prevent root intrusion. If you have continuing problems with roots in your lateral, you may have to remove the tree or shrub associated with the roots.
- **Sewer Odor:** Another concern property owners have is they can smell sewer odors inside their home or building. Under each drain in your plumbing system, there is a "P-Trap". If there is water in this fitting, odors or gasses from the sewer cannot enter through the drain from either the property owner's lateral or the City main. Periodically check to make sure unused floor drains, sinks etc. have water in the "P-trap". Another way to prevent sewer odor is to ensure the vents, which are located on your roof, are free from bird nests, leaves, etc. When these vents are clear, the sewer odors will escape through these vents.
- **Illegal Plumbing Connections:** Do not connect French drains, sump pumps and other flood control systems to your sanitary sewer. It is *illegal*, and debris and silt will clog your line. You may need to consult a plumber to correct any illegal connections.
- **Needles:** The presence of hypodermic needles in the wastewater collection system presents special and possible deadly problems for wastewater collection and wastewater treatment employees. **PLEASE DO NOT FLUSH NEEDLES.** The proper method of disposal is to re-cap the needle and put it into a "sharps container". When full, tape the container securely, and call your local pharmacy for advice on proper disposal methods. For disposal sites in the area go to <http://www.safeneedledisposal.org/centers.html> to find the nearest location. **PLEASE DO NOT FLUSH THEM OR THROW THEM INTO THE GARBAGE!**

What Causes a Sewer Back-up?

- Kitchen grease, food scraps, egg shells, potato peels, excessive toilet paper, disposable diapers, baby wipes and feminine products can accumulate and cause a blockage
- Tree roots seeking moisture can grow through joints and cracks in the lines, causing a blockage
- Vandals have stopped up lines by putting bricks, concrete, wood, oil filters, construction debris, and garbage into the sewer lines
- Illegal hookups allow excess water into the lines. Outside stairwell drains, sump pumps, roof leaders, and drain gutters should never be connected to the sewer system. A sewer system is designed to carry a predetermined amount of sewage. Rain water not only overloads the system, but also raises the cost of the treatment process

What Can I Do to Prevent Back-ups?



To protect your property follow these simple **Do's** and **Don'ts**;

- **DON'T** Put diapers or sanitary napkins in the toilet
- **DON'T** Dispose of grease down the drain
- **DON'T** Plant trees near sewer lines
- **DON'T** Connect any drains or sump pumps to the sewer system
- **Do** locate and keep accessible the sewer cleanout in your front yard. If you do not have a cleanout, have one installed by a plumber. The cleanout is the property owner's responsibility
- **Do** check your homeowner's insurance policy. If you are not covered for back-ups, call your agent for information on costs and coverage options

Do You Know Where Your Cleanout Is?

- The cleanout is a pipe located near the property line which rises from your sewer line to about 4" below ground level and is capped in a sewer cleanout box
- Quite frequently, the cleanout becomes buried or hidden over the years and is forgotten. In some cases, older homes may never have had a cleanout installed
- As a property owner, you are responsible for your cleanout. If the cleanout is buried, a plumber should be able to locate and raise it for you

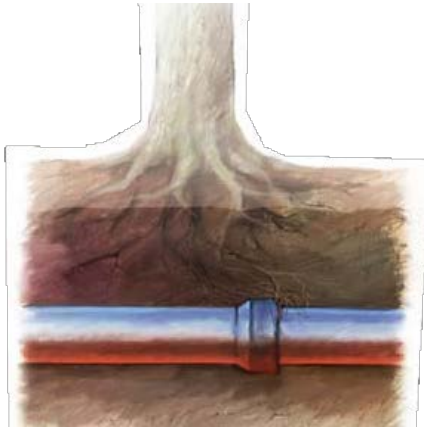
What About The Cost Involved In The Clean Up?

The Wastewater Division is very sensitive to your feelings for the inconvenience caused by a sewer back-up in your home. The City is responsible for maintaining the wastewater lines from the main line to your property line. We clean a quarter of the City's sewer system each year and take pride in eliminating sewer back up all together. The City also checks all areas of concern each day to make sure we are doing our part to eliminate overflows. Public Works personnel will respond immediately to investigate and resolve collection system or storm drain issues...with your help; we can reduce sewer back-ups.

It is the homeowners' responsibility to maintain the house cleanouts and sewer lateral from the property line to the house.

OTHER CAUSES OF SEWER OVERFLOWS

The continual flow of nutrient-filled water found in sewer lines can attract tree roots through pipe joints and manholes. The roots can then grow, forming blockages in the pipes. Always avoid planting trees and shrubs near residential and City sewer lines.



Rock, debris, vandalism and construction are also factors which can contribute to sewer overflows.

Report Sewer Overflows!!

If you see or smell something you think might be a sewer spill, report it immediately by calling: 925-516-6060

After Hours Water or Sewer Emergency contact
Police Dispatch (925) 778-2441

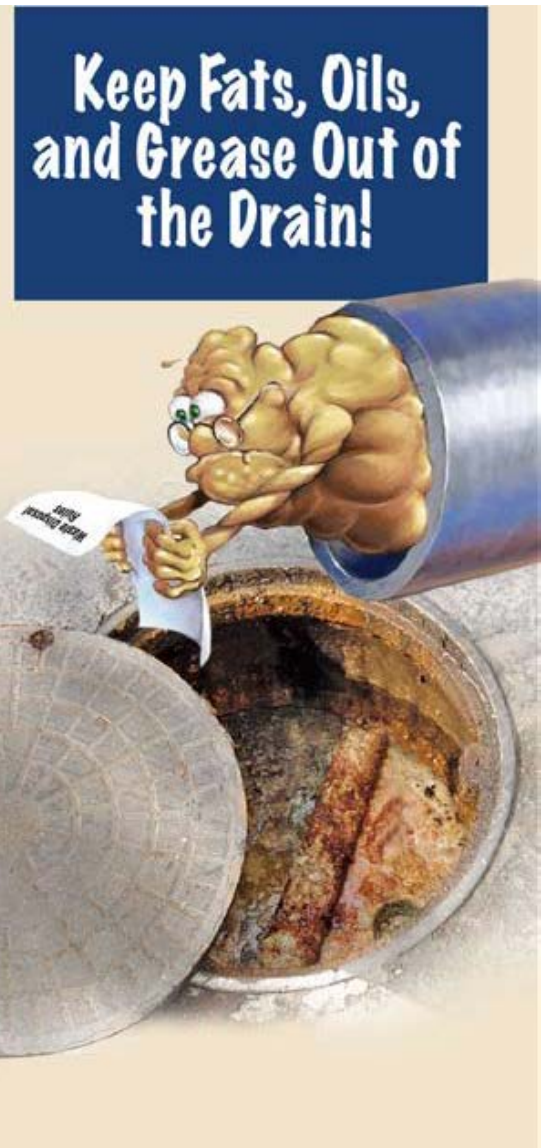
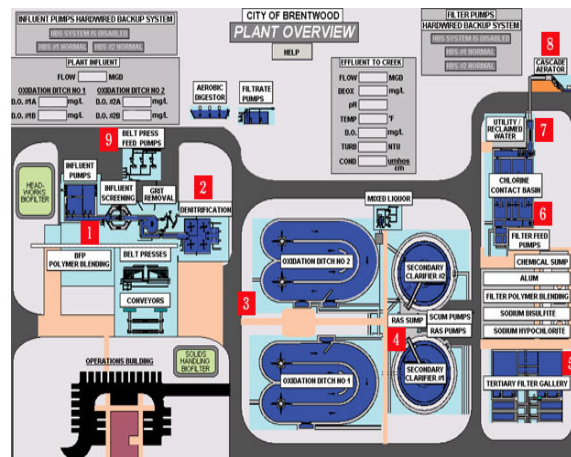


About

The City of Brentwood

The City of Brentwood's sanitary sewer system collects and treats an average of 3.3 million gallons of wastewater per day at its city owned and operated treatment plant.

The city serves an estimated 48 thousand residents and more than 216 current businesses within the city limits.



COOKING GREASE

Cooking grease is one of the primary causes of sewer overflows throughout the City of Brentwood's sanitary sewer system. Sewer overflows can not only pollute streams, rivers, and the Bay, they can endanger public health.



All cooking oils disposed of improperly can cause problems in the sewer system. These include:

- **Frying oil**
- **Salad oil**
- **Soups**
- **Meat drippings**
- **Bacon fat**
- **Greasy leftovers**

IMPORTANT FACTS

Cooking grease clogs pipelines in much the same way fatty foods clog human arteries. The grease clings to the inside of a pipe, builds up and eventually causes a complete blockage.

Costly home plumbing bills are often the result of grease-clogged pipes. Residential laterals can clog easily since they are only 4" inches in diameter.



Many people are unaware that pouring hot water and detergent down the drain only breaks up grease temporarily. Grease should never be poured down the drain. If a small amount of grease gets in your drain, flush immediately.



Step 1

Small amounts of cooking oil and grease should be poured into a disposable container (can, milk or juice carton) and put in the trash. Larger amounts of used cooking oil should be brought to the Household Hazardous Waste Collection Facility for disposal. Call **800-646-1431** for any information.

Step 2

Dishes and pots coated with grease should be wiped clean with a disposable paper towel prior to being washed in the sink or dishwasher.

Step 3

Do not put egg shells, meat trimmings, or scraps in the garbage disposal; always put them in the trash.

APPENDIX D

City of Brentwood Municipal Code

13.04.010 Purpose and policy.

These sanitary sewer use rules and regulations are intended to do the following:

- A. Set uniform requirements for discharges into the wastewater collection and treatment system and enable the city to comply with the administrative provisions of the clean water grant regulations, the water quality requirements set by the applicable effluent limitations, national standards of performance, toxic and pretreatment effluent standards and all other discharge criteria which are required or authorized by state or federal law, and to derive the maximum public benefit by regulating the quality and quantity of wastewater discharged into the city of Brentwood sewer system;
- B. Provide for and regulate the disposal of sanitary sewage into the sanitary sewer system of the city in such a manner and to such an extent as is reasonably necessary to sustain the ability of the sanitary sewer system to handle and dispose of sanitary sewage;
- C. Provide for and regulate the disposal of industrial wastes into the sanitary sewer system of the city in such a manner and to such an extent as may be reasonably necessary to maintain and increase the ability of such system to handle and dispose of industrial waste without decreasing the ability of the system to handle and dispose of all sanitary sewage;
- D. Prevent the introduction of pollutants into the sanitary sewer system which will pass through the treatment works of the city and cooperating agencies or otherwise be incompatible with such works or interfere with the ability of the works to treat, discharge and recycle wastewater, or to use or dispose of biosolids;
- E. Improve opportunities to recycle and reclaim treated effluent and wastewater biosolids;
- F. Protect the physical structures of the sanitary sewer system and the efficient functioning of its component parts;
- G. Protect the city, its citizens, and the personnel working in the sanitary sewage system facilities;
- H. Preserve and protect the health, safety and property of the public;
- I. Protect the environmental health of Sacramento Delta Area and the Eastern Contra Costa County Water Shed;
- J. Provide a means for determining wastewater volumes, constituents and characteristics, the setting of charges and fees and the issuance of permits to certain users;

K. Derive revenues to be used to defray the city's cost of operating and maintaining adequate wastewater collection and treatment systems and to provide funds for capital outlay, bond service costs, capital improvements and depreciation;

L. The territory served by the city shall be all premises within the boundaries of the city or the sewer service area of the city now or at any time hereafter connected to and served by, or required by this chapter to be connected to and served by the sewer system. (Ord. 808 § 1 (part), 2005)

13.04.015 Conflicts with other provisions.

In the event of any conflicts or inconsistencies between the provision of this chapter and any other provisions of this code and/or existing city ordinance conflicts herewith, the provisions of this chapter shall prevail and/or the provisions providing the greatest protection to the sewage works and Sacramento Delta Area shall prevail as determined by the director of public works. (Ord. 808 § 1 (part), 2005)

13.04.020 Fiscal management.

A. It shall be the duty of the director of public works to supervise all connections to the sewer system and to enforce all operational provisions of this chapter, excepting only those relating to the administrative and fiscal management of this chapter including the billing and collection of charges and fees, and disposition of revenues under this chapter. All quantities of domestic sewage and industrial waste shall be determined by the director of public works and shall be based upon the respective percentages and qualities of domestic sewage, industrial waste, water and/or solids actually discharged into the sewer system. Any owner or occupant of any premises who disagrees with any quantitative determination made by the director of public works may, at his own expense, install measuring devices which are approved by the director of public works.

B. The fiscal officer of the city shall keep an accurate accounting and records showing the source, amount and disposition of all funds received hereunder and shall deposit all revenues collected under this chapter in the appropriate enterprise fund accounts.

C. All revenues received by the fiscal officer under this chapter, excepting all reimbursable connection charges provided for in this chapter, shall, when collected, be held by the treasurer or deposited by the treasurer with duly appointed banks, and disbursed for sewerage and sewerage-related functions exclusively, in accord with the budget categories of that enterprise. (Ord. 808 § 1 (part), 2005)

13.04.025 Violation unlawful.

It is unlawful for any person, firm, association or corporation to unknowingly and/or knowingly violate any of the provisions of this chapter. Such violation is a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding five hundred dollars, or by imprisonment in the county jail of the county of Contra Costa for a period not exceeding one hundred eighty days, or by both such fine and imprisonment. (Ord. 808 § 1 (part), 2005)

13.04.030 Definitions.

When used in this chapter or in connection with any resolution, regulation, permit, order, or other action undertaken pursuant to this chapter, the following words shall have the following meanings:

“ACT” or “Act” means the Federal Water Pollution Control Act, also known as the Clean Water Act, P.L. 92-500, and amendments thereto, as well as any guidelines, limitations, standards, and regulations promulgated by the United States government through the Environmental Protection Agency pursuant to the Act.

“Agency” means the city when the context so indicates.

“Ammonia” means a form of nitrogen which is chemically definable as NH_3 .

“Applicant” means the person making application for a permit for a sewer or plumbing installation or discharge, and shall be the owner of the premises to be served by the sewer or plumbing installation or from which the discharge is to occur, or the owner’s duly authorized agent.

“Audit protocols” mean the procedures to be followed in performing a mass audit study.

“Average concentration” means the concentration of a pollutant in an industrial user’s discharge which is calculated by adding the concentrations of the particular pollutant in all composite samples taken during a given time period including, but not limited to, self-monitoring samples, and dividing the total by the number of samples taken.

“Backwater protection” means a backwater valve, ejector or pump system, or relief valve or a combination of two or more of these devices approved by the building official and intended to prevent sewage from backflowing into a structure.

“Beneficial uses” mean uses of the waters of the state which may be protected against quality degradation, including domestic, municipal, agricultural, and industrial supply, power generation, recreation, aesthetic enjoyment, navigation, and the preservation and enhancement of fish, wildlife, and other aquatic resources or reserves, and other uses, both tangible or intangible as specified by federal or state law.

“Best management practices” mean schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of pollutants to the sanitary sewer system which have been determined by the director of public works to be cost-effective for particular industry groups, business types, or specific industrial processes.

“BOD” or “biochemical oxygen demand” means the measure of decomposable material in domestic or industrial wastewaters as represented by the oxygen utilized in decomposition

over a period of incubation of five days at twenty degrees centigrade under laboratory conditions pursuant to standard methods.

“Building” means any structure used for a residence, place of business, recreation, or other purpose of human habitation.

“Building sewer” means that portion of any sewer conveying wastewater from the premises of a user to a community sewer, beginning at the plumbing or drainage outlet of any building and running to the lateral sewer at or near the property line.

“Categorical pretreatment standards” mean the limitations on pollutant discharges to POTW’s promulgated by EPA in accordance with Section 307 of the Act, applying to specified process wastewaters of particular industrial categories. [40 CFR Section 403.6 and Parts 405 through 471].

“City” means the city of Brentwood, a municipal corporation and general law city organized and existing under the Constitution and laws of the state of California.

“City manager” means the city administrator or chief administrative officer of the city of Brentwood.

“Clerk” means the city clerk of the city of Brentwood.

“COD” or “chemical oxygen demand” means the measure of chemically decomposable material in domestic or industrial wastewater as represented by the oxygen utilized as determined by the appropriate procedure described in standard methods.

“Code of Federal Regulations” or “CFR” means the Code of Federal Regulations published by the Office of the Federal Register, National Archives and Records Administration. Whenever a reference is made to any portion of the CFR, or to any other federal regulation, that reference shall include to all amendments and additions to that portion of the CFR or regulation, now or hereinafter adopted.

“Combined sewer” means a sewer receiving both surface runoff and sewage.

“Commercial owner” means any owner who is not a residential owner, industrial owner or institutional owner.

“Commercial sewer service” means the furnishing of sewer service to the premises of any commercial owner.

“Community sewer” means a sewer owned and operated by the city and tributary to a treatment facility operated by the city.

“Compatible pollutant” means biochemical oxygen demand, suspended solids, pH, and fecal coliform bacteria, plus additional pollutants identified in the city’s national pollutant

discharge elimination system (NPDES) permit if the city's treatment plant is designed to treat such pollutants and if fact, does remove such pollutants to a substantial degree.

"Composite sample" means a flow-proportional or time-proportional sample, which accurately represents the average pollutant concentration discharged during a continuous time period. A composite sample may be obtained manually or automatically, and discretely or continuously. For manual compositing, at least six individual samples from each sample point shall be combined and mixed to obtain one composite sample; flow-proportion may be obtained either by varying the time interval between each discrete sample and the volume of each discrete sample.

"Connection charge" or "public facilities fees" mean the charges levied upon all premises to be connected or required to be connected to the sewer system, which charges shall be based on the value of the system such premises are receiving the use of as well as the cost of expansion of the system to provide for such new connection.

"Contamination" means an impairment of the quality of water of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of wastewater, whether or not waters of the state are affected.

"Contractor" means an individual, firm, corporation, partnership or association licensed by the state of California to perform the type of work to be done under the permit.

"Cost-effective" means total project costs, if financed over a five-year period at the prime interest rate published in the Wall Street Journal plus two percent at the time the project costs are being determined, do not exceed the total savings which would be generated by the project during the same five-year period. Project costs shall also be considered cost-effective, if financing assistance is available to the discharger, from the city or any other source, at a lower rate and the project costs, if financed over a five-year period at that rate do not exceed the total savings which would be generated by the project during the same five-year period.

"Council" means the city council of the city of Brentwood.

"Critical user" means a discharger whose wastewater contains priority pollutants, or who discharges waste which has the potential to cause interference, excluding sanitary sewage.

"Date of presentation" means the date upon which a bill or notice is mailed or delivered personally to the owner.

"Department" means the city of Brentwood department of public works.

"Diluting waters" means noncontact cooling water, boiler blow-down, domestic sewage, groundwater, stormwater, surface drainage, or potable waters which are not a part of an industrial process and which do not contain priority pollutants but which are combined with industrial wastewater prior to the monitoring point for industrial wastewater discharge.

“Direct connection benefit” means the benefit derived from availability to any premises of a main sewer to which connection can be made by a house sewer or main extension.

“Director of public works” means the director of public works or the city engineer, or engineer or his or her designee, in either case being the department or division manager responsible for supervising wastewater operations.

“Discharger” means any person who discharges or causes a discharge to a public sewer. See also specific discharger definitions.

“Dissolved solids” or “dissolved matter” means the solid matter in solution in the wastewater and shall be determined by evaporation of a sample from which all suspended matter has been removed by filtration as determined by the procedures in the standard methods.

“Domestic sewage” means the water-borne waste derived from the ordinary living processes and of such character as to permit satisfactory disposal, without special treatment, into the sewer system.

“Domestic sewer service” means the furnishing of sewer service to the premises of any residential owner.

“Domestic wastewater” means the water-carried wastes and wastewater produced from noncommercial and nonindustrial activities and resulting from normal human living processes.

“Drainage unit fixture” means a drainage unit fixture listed in Uniform Plumbing Code.

“Dwelling unit” means any single-family dwelling of one or more rooms having one or more plumbing fixtures suitable for residential occupancy by any number of persons living together as a single family, including single-family dwelling units, and each group of rooms constituting a dwelling unit for a single family in any multiple-dwelling structure.

“Effluent” means the liquid outflow of any facility designed to treat, convey or retain wastewater.

“Engineer” means the city engineer or designee.

“Family” means any one or more persons comprising one family unit and residing in the same dwelling unit.

“Garbage” means wastes from the preparation, cooking and dispensing of foods, and from the handling, storage, and sale of produce.

“Grab sample” means a single discrete sample collected at a particular time and place which represents the composition of the wastestream only at that time and place with no regard to the flow in the wastestream.

“Gravity separation interceptor” means any facility designed, constructed, and operated for the purpose of removing and retaining dangerous, deleterious, or prohibited constituents from wastewater by differential gravity separation before discharge to the public sewer.

“Grease” means ether-soluble matter, and shall include each of the following two types: dispersed grease, which means grease which is not floatable grease; floatable grease, which means grease which floats on the surface of quiescent sewage water or other liquid or which floats when mixed or added to water.

“Groundwater discharger” means a discharger which pumps and treats contaminated groundwater and discharges to the sanitary sewer system. This class of discharger is variable, so some permits are a year in length while others may be written for shorter durations. Hydrocarbons are the most common pollutants.

“Heavy discharger” means a discharger which may contribute over one hundred fifty pounds per day of BOD or TSS to the sanitary sewer system. Heavy dischargers are classified as significant industrial user (SIU’s) if the volume of discharge is greater than twenty-five thousand gallons/day or they use processes which have the potential to detrimentally affect the processes of the plant.

“Holding tank waste” means any waste from holding tanks, such as vessels, chemical toilets, trailers, septic tanks, and vacuum-pump tank trucks.

“House sewer” means any part of any sewer piping beginning at the junction thereof with any building plumbing system at not closer than two feet outside the foundation wall of the building serviced, and terminating in any main sewer.

“Inadequate height differential” means the flood level rim of a drainage unit fixture on a property’s sanitary sewage drainage system is less than one foot above the next upstream manhole or flushing inlet cover on the sanitary sewer main serving the fixture’s drainage piping.

“Incompatible pollutant” means any pollutant which is not a “compatible pollutant” as defined in this section.

“Individual system” is defined as a system which consists of (1) the drainage pipes of a structure and the septic tank and subsurface absorption system to which they are connected; or (2) any alternative system designed for the disposal of sewage and acceptable to the Contra Costa County Department of Environmental Health.

“Industrial connection sewer” means the sewer connecting the building sewer or building waste drainage system to the public sewer for the purpose of conveying industrial wastewater.

“Industrial owner” means any owner on whose premises any manufacturing or processing activity for profit is engaged in, including the manufacturing or processing of agricultural products, animals, poultry, goods, wares or other products or materials.

“Industrial sewer service” means the furnishing of sewer service to the premises of any industrial owner.

“Industrial user” means any nonresidential user who discharges industrial wastes to the sanitary sewer system.

“Industrial waste” means the wastes from producing, manufacturing and processing operations of every kind and nature except domestic sewage.

“Industrial wastewater” means all water-carried wastes and wastewater of the community, excluding domestic wastewater and uncontaminated water, and includes all wastewater from any producing, manufacturing, processing, institutional, commercial, agricultural, or other operation where the wastewater discharged includes significant quantities of wastes from nonhuman origin.

“Inspector” means a person authorized by the director to inspect wastewater generation, conveyance, processing, disposal and monitoring facilities.

“Institutional owner” means any owner, public or private, operating a public or nonprofit school, church, hospital, lodge, club, fire department, library, memorial building or other public or nonprofit activity.

“Institutional sewer service” means the furnishing of sewer service to the premises of any institutional owner.

“Interference” means a discharge which alone, or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the processes or operation of the sanitary sewer system, including the POTW, prevents the POTW from using its chosen sludge use/disposal practice, or causes or significantly contributes to a violation of any requirement of the national pollutant discharge elimination system (NPDES) permit, which is a permit issued to the city pursuant to Section 402 of the Act. “Interference” also includes prevention of biosolids use or disposal by the POTW in accordance with published regulations providing guidelines under Section 405 of the Act [33 U.S.C. Sections 1251 through 1387] or in regulations developed pursuant to the Solid Waste Disposal Act (SWDA) [42 U.S.C. Section 6901, et seq.], the Toxic Substances Control Act [15 U.S.C. Sections 2601 through 2654], or more stringent state regulations (including those contained in any state biosolids management plan prepared pursuant to Title IV of SWDA) applicable to the method of disposal or use employed by the POTW.

“Lateral sewer” means the portion of a sewer lying within a public right-of-way or easement between the city cleanout and the main sewer to which a building sewer is connected.

“Licensed professional” means a person authorized under California law to render an applicable certification to the property owner and the city regarding a specific question under this section.

“Light discharger” means a discharger which contributes less than fifty pounds per day of BOD or suspended solids to the sanitary sewer system. This category is often defined by whether or not the discharger has a grease trap.

“Main extension” or “sewer extension” means the extension of any main trunk sewer or main sewer, exclusive of house sewers and service connections, beyond existing facilities in streets and public easements.

“Main sewer” means a public sewer designed to accommodate more than one lateral sewer and is constructed in any street or public easement.

“Main trunk sewer” means any sewer constructed in any street or public easement to accommodate a system of main sewers.

“Main trunk sewer extension benefit” means any benefit, other than a direct connection benefit, derived from the availability to any premises of a main trunk sewer extension, the cost of construction of which was paid by any person after the effective date of the ordinance codified in this chapter, and no part of the cost of construction of which was paid by the owner of such premises or his predecessor. No premises shall be deemed to derive main trunk sewer extension benefit if any further main trunk sewer extension is required to connect such premises to the sewer system.

“Major contributing industry” means any wastewater contributor identified in the Standard Industrial Classification (SIC) Manual in any of Divisions A, B, D, E and I which:

1. Has a discharge flow of fifty thousand gallons or more per average work day; if seasonal, the average shall be computed on the period of use; or
2. Has a flow of or pollutant loading greater than five percent of the total flow to the POTW.

“Manager” means the city manager.

“Mass audit study” means an investigation of pollution prevention and source reduction measures performed by or for an industrial user, pursuant to audit protocols adopted by the director, to analyze the volume and concentration of nickel, copper, and/or any other priority pollutant identified in regulations adopted by the director in an industrial user’s process streams and discharge, and to identify the maximum feasible reduction measures available to the industrial user.

“Maximum allowable concentration” means the highest permissible concentration or other measure of pollutant magnitude taken at a specific point in time.

“Maximum feasible reduction measures” mean all individual measures, and all functionally interdependent measures, of reducing the mass of specified pollutants in an industrial user’s discharge, which the director finds would be cost-effective if installed by the

industrial user. For the purpose of this chapter, individual measures which are not cost-effective shall nonetheless be considered part of a functionally interdependent group of cost-effective measures if they substantially reduce the mass of pollutants discharged, and the other measures with which they are grouped are their functional prerequisite.

“Moderate discharger” means a discharger who contributes fifty to one hundred fifty pounds per day of BOD or suspended solids to the sanitary sewer system. This category is generally defined by the presence of a grease interceptor or one or more grease traps.

“Multiple lodging structures” mean any two or more lodging units in any single building or structure or group of buildings or structures, including any roominghouse, hotel or motel.

“Multiple-dwelling structure” means any two or more dwelling units in any single building or structure or group of buildings or structures, including any apartment house or apartment court, excepting any multiple lodging structure.

“New source” means any wastewater generating processes constructed after the publication of proposed pretreatment standards which are applicable to the source and which are independent of an existing source.

“Nonconventional discharger” means a discharger involved in any business or manufacturing where the possibility exists that a hazardous or toxic material may be discharged to the sewer system.

“Occupant” means any person actually occupying any premises, whether as owner or tenant or under contract or otherwise.

“Outlet” means the end of a house plumbing system three feet outside the foundation of the building.

“Owner” means the person owning fee title to any premises as shown by the official records of the county recorder of Contra Costa County.

“Pass-through” means a discharge which exits the sewage treatment system to the waters of the United States in quantities or concentrations which alone, or in conjunction with other discharges, causes a sewage authority to violate its NPDES permit.

“Peak flow rate” means the average rate at which wastewater is discharged to a public sewer during the highest thirty-minute flow period in the preceding twelve months.

“Permit” means any written authorization required pursuant to this or any other ordinance or regulation of the city for the installation of any sewer or the discharge of waste into the sewer system.

“Person” means any person, firm, company, corporation, partnership, association or any public corporation billed for connection to or for facilities or services furnished by the sewer system.

“pH” means the logarithm of the reciprocal of the concentration of hydrogen ions in moles per liter of solution.

“Plant” means the city of Brentwood publicly owned treatment works.

“Plumbing system” means all plumbing fixtures and traps or soil, waste, special waste and vent pipes, and all sanitary sewer pipes within a building and extending to the building sewer connection three feet outside the building foundation.

“Pollution” means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

“POTW” means a publicly owned treatment works. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the POTW.

“Premises” means a single-family dwelling, duplex, triplex, quad-plex, apartment house, commercial building, industrial building, or other structure used or useful for habitation or other occupancy of human beings.

“Pretreatment” or “treatment” means the reduction of the amount of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such chemical or biological processes, or process changes by other means, except as prohibited by 40 CFR Section 403.6(d).

“Priority pollutants” means all pollutants as defined by the “General Pretreatment Regulations” of the Environmental Protection Agency; found in 40 CFR Sections 401 and 403.

“Process flow” means the daily, twenty-four hour, flow of wastewater from any kind or nature of production, manufacturing or processing operation, including industrial and commercial operations where water is used for the removal of any type of waste other than sanitary sewage. Process flow does not include diluting waters.

“Public corporation” means the city or any political subdivision, city, county, district, the state of California or the United States of America, or any department or agency of any thereof. The singular in each case shall include the plural.

“Public sewer” means any sewer dedicated to public use and whose use is controlled by a public corporation.

“Publicly owned treatment works” or “POTW” means a treatment works as defined by Section 212 of the Act [33 U.S.C. Section 1292], which is owned by the city. This definition includes any sewers conveying wastewater to the POTW treatment plant, but does not include pipes, sewer, or other conveyances not connected to a facility providing treatment. For the purposes of this chapter, “POTW” shall also include any sewers conveying wastewaters to the POTW from persons outside the city who are, by contract or agreement with the city, users of the city’s POTW.

“Reasonable control measures” mean control technologies, best management practices, source control practices and waste minimization procedures which prevent or reduce the introduction of pollutants to the sanitary sewer system and are determined by the director to be cost-effective for particular industry groups, business types, or specific industrial processes.

“Residential owner” means any owner whose premises are used solely for residential purposes by any one or more persons.

“Sanitary sewage” means water-carried wastes from residences, business buildings, institutions, and industrial establishments, excluding ground, surface and storm waters, subsurface drainage and also excluding industrial waste.

“Sanitary sewer” means a sewer carrying sanitary sewage to which storm, surface and ground water are not intentionally admitted.

“Sanitary sewer system” or “sewerage system” means all sewers, treatment plants, and other facilities owned or operated by the city for carrying, collecting, pumping, treating, and disposing of sanitary sewage and industrial wastes.

“Sewage” means a combination of water-carried waste from residences, business buildings, public buildings, institutions and industrial establishments.

“Sewage pumping plant” means any facility designed and constructed to raise wastewater in elevation or to overcome head losses due to pipeline friction.

“Sewer” means a pipe or conduit for carrying sewage.

“Sewer service” means the services and facilities for collection, treatment and disposal of sewage furnished or available to premises by the sewer system.

“Sewer system” means the entire municipal sanitary sewer system of the city of Brentwood together with such additions or improvements thereto as may be made from time to time, and which entire system includes the acquisition, construction, operation, maintenance, financing, repair and upgrading of the system and its appurtenances and services necessary to that enterprise.

“Sewerage” means any and all facilities used for collecting, conveying, pumping, treating and disposing of wastewater.

“Side sewer” means the sewer line beginning at the house outlet and terminating at the main sewer and includes the building sewer and the lateral sewer.

“Significant change” means any change in an industrial user’s operation which results in a flow exceeding the expected peak flow as shown in the sewage treatment plant expansion connection charge calculation for the property on which the industrial user is located.

“Significant industrial user” or “SIU” means:

1. A discharger subject to categorical pretreatment standards;
2. A noncategorical discharger which, in the opinion of the manager, requires special regulation or source control;
3. A noncategorical discharger contributing a process wastestream which makes up five percent or more of the average dry weather capacity of the city of the POTW treatment plant, or discharges an average of twenty-five thousand gallons or more per day of process wastewater to the POTW; or
4. A noncategorical discharger contributing more than one hundred fifty pounds per day of BOD or suspended solids.

“Significant noncompliance” means a compliance status assigned to an industrial discharger meeting any of the following criteria:

1. Chronic violations exceeding the daily maximum limit or the average limit sixty-six percent of the time during a six-month period of the same pollutant parameter;
2. Technical review criteria (TRC) violations in which thirty-three percent or more of measurements for each pollutant parameter taken during a six-month period equal to or exceeding the product of the applicable limit and the TRC value (1.4 times the limit for conventional pollutants or 1.2 times the limit for toxic pollutants);
3. A violation of pass-through or interference;
4. A discharge of imminent endangerment to human health, welfare, or the environment, or which require the POTW to use its emergency authority under 40 CFR Section 403.8(f)(1)(vi)(B);
5. Violation of a compliance milestone by ninety days;
6. Violation of report submittal deadlines by sixty days;
7. Failure to report noncompliance; or
8. Any other violation deemed significant by the director.

“Single-family unit” means the place of residence of a single family. Property improved for multifamily purposes shall constitute the number of units the facilities thereon provide in number of single-family units. When such improvements are for other than residential purposes, the number of units shall be determined by dividing the total number of persons regularly using or occupying those premises by four.

“Standard methods” mean the procedures set forth in the Code of Federal Regulations unless another method for the analysis of industrial wastewater has been approved in writing in advance of use of the procedure by the director. The current approved edition of Standard Methods for the Examination of Water and Wastewater, as published by the American Public Health Association, will be used. All analyses shall be performed by a laboratory certified by the state for the specific pollutants and matrix to be analyzed, unless otherwise approved in writing, by the director, prior to performance of a sample analysis.

“Storm sewer” or “storm drain” means a sewer carrying storm and surface or ground water and drainage, but excludes sewage and polluted industrial wastes.

“Stormwaters” mean the flow resulting from rainfall.

“Street” means any public highway, public road, public street, public avenue, public alley, public way, public place, public easement, or public right-of-way.

“Suspended solids” or “suspended matter” means solids which either floats on the surface of, or are in suspension in, water, sewage, or other liquids and are removable by laboratory filtration in accordance with procedures described in standard methods.

“Technical review criteria” or “TRC” means the multipliers used to gage the degree or severity of violations.

“Total toxic organics (TTO’s)” means the sum of the concentrations for each of the regulated toxic organic compounds listed at 40 CFR Section 401.15 and which are found in the discharge at a concentration greater than ten micrograms per liter.

“Toxic pollutant” means any pollutant or any combination of pollutants listed as toxic in regulations promulgated by the EPA under the provisions of CWA 307 (a) or other statutes.

“Treasurer” means the city treasurer of the city of Brentwood.

“Trucked or hauled waste” means any waste discharged into the sanitary sewer system after being placed in a motorized vehicle for removal from the location where the waste was generated or produced.

“Trunk sewer” means a sewer constructed, maintained, and operated by the city which conveys wastewater and into which lateral and collecting sewers discharge.

“Uncontaminated water” means any wasted water of the community not contaminated or polluted with wastewater and which is suitable or could readily be suitable for discharge to the city’s stormwater drainage system.

“User” means any person responsible for payment of sewer service charges.

“Wastewater” means the liquid- and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, whether treated or untreated, which is contributed into or permitted to enter the POTW. (Ord. 808 § 1 (part), 2005)

13.04.035 Abbreviations.

When used in this chapter or in connection with any resolution, regulation, permit, order, or other action undertaken pursuant to this chapter, the following abbreviations shall have the following meanings:

BOD	—	Biochemical Oxygen Demand
CFR	—	Code of Federal Regulations
COD	—	Chemical Oxygen Demand
EPA	—	Environmental Protection Agency
L	—	Liter
mg	—	Milligrams
mg/L	—	Milligrams per liter
NPDES	—	National Pollutant Discharge Elimination System
SIC	—	Standard Industrial Classification
SWDA	—	Solid Waste Disposal Act [42 U.S.C. Section 6901 et seq.]
U.S.C.	—	United States Code
TSS	—	Total Suspended Solids

(Ord. 808 § 1 (part), 2005)

13.04.040 Sewer required.

A. Requirement to Connect. No owner or occupant of any premises within the city on which sewage is produced (1) on which premises the nearest outlet of the plumbing system is located within three hundred feet from the point at which a connection can be made to the sewer system, or (2) having no plumbing system, but in which a plumbing system could be installed with the nearest outlet located within three hundred feet from the point at which a connection could be made to the sewer system, shall use any means of sewage disposal other than through the sewer system. The owner of any premises so located and upon or in which any sewage is produced shall be required to connect, at owner’s expense, such premises to the sewer system within ninety days from the date when a main sewer located within the distance specified above is completed and available for connection to such premises. The ninety-day period shall not begin until the city has provided written notification of the duty to connect to the sewer system to the property owner listed on the latest taxation rolls.

B. Available for Connection. Availability for connection shall be defined as a sewer main which is (1) located in the street on which the property fronts, (2) is sized to adequately handle the additional sewage, and (3) extends across the full frontage of the subject property. The requirements of this section shall not be construed to require an owner or occupant to extend a sewer main.

C. Waiver. The above requirement to connect to the sewer system may be waived by the director of public works, provided the owner or occupant of such premises provides written documentation from the Contra Costa County Health Department that the existing system is functioning properly. If the system is not functioning properly, but may be made to do so with minor repairs, a waiver may be granted subject to the discretion of the director of public works. Properties which require major modifications to the septic system, such as the replacement of a leachfield, shall not be eligible to receive a waiver and will be subject to subsection A of this section. Furthermore, any properties which previously received waivers and subsequently required major modifications to the septic systems shall also be subject to subsection A of this section.

D. Reinspection Upon Sale. Properties operating under a waiver of this section shall be required to be reinspected upon sale of the property or transfer of title. Not submitting written verification from the Contra Costa County Health Department within thirty days after the property is sold or is transferred shall invalidate the waiver, and the requirements of subsection A of this section shall apply.

E. Applications and Fees. Applications to apply for a waiver may be obtained at the city public works department. This shall be accompanied by a processing fee, the amount of which shall be established by city council resolution. Fees for inspection by the Contra Costa County Health Department shall be the responsibility of the owner or occupant of the premises.

F. Separate Connections. There shall be a separate connection to the sewer system for each building or structure served, except that pursuant to the approval of the director of public works, any two or more buildings or structures on the same lot may be served by one sewer connection.

G. Industrial Waste. No owner or occupant of any premises within the city on which industrial waste is produced shall discharge industrial waste into the sewer system without first obtaining a written permit from the director of public works for such connection. No such owner or occupant of any such premises shall use any means of industrial waste disposal other than through the sewer system. The issuance of permits pursuant to this subsection shall be conditioned upon the installation by the applicant of such protective devices as shall be determined by the director of public works as provided in this chapter.

H. Each building permit for a structure containing a plumbing system, or subdivision or parcel map improvement plans shall contain provisions for connection to the sewer system except as follows:

1. An individual system has been approved by the Contra Costa County Department of Environmental Health;

2. Minimum lot size is five acres. For purposes of this chapter, each lot within a subdivision shall meet the five-acre minimum lot size requirement regardless of whether each lot has an individual septic system or more than one lot is served by a common septic system;

3. Sewer lines are constructed for future connection to the sewer system or a deferred improvement agreement is approved by the city council;

4. The city's discretionary action regarding the development or subdivision of the property including, but not limited to, subdivision map, parcel map, design review or conditional use permit, expressly allows use of an individual system; and

5. The intended use is single-family residential, industrial, commercial or agricultural.

I. The minimum lot size requirements of this section may be reduced to one acre if the lot was a legally recorded lot prior to December 14, 1989.

J. The city council may grant to a premises outside the city a permit to connect to the sewer, but before a permit will be granted to any premises outside the city, the city council shall find and determine:

1. The applicant is subject to all the provisions of this chapter;

2. The applicant must submit an application form, together with a recommendation for approval by the director of public works. The application must be accompanied by the rate established in the city current fee schedule, for the processing of such application; the fee is not returnable;

3. The applicant must execute an agreement covenanting payment of all charges and compliance with all city ordinances and policy positions relating to sewers and services, in a form approved by the city.

K. In passing upon any application for sewer service outside the city, the city council shall determine approval of the application is in the best interests of the city and is in conformance with existing policy positions developed by the council.

L. Additional charges shall be as follows:

1. Prior to the issuance of any permit, all fees as provided by this chapter shall be paid;

2. The charge for sewer service shall be an amount determined by resolution of the city council, but such charge shall never be fixed at an amount less than the total charges,

including taxes, assessments and fees for all service to a premises within the city limits, and shall be paid in the manner and time prescribed for premises within the city limits. (Ord. 808 § 1 (part), 2005)

13.04.045 Occupancy prohibited.

No building, industrial facility nor other structure shall be occupied or used until and unless the owner of the premises has complied with all applicable rules and regulations of this chapter. (Ord. 808 § 1 (part), 2005)

13.04.050 Construction permit required.

A. Approval Required. No person shall construct or cause to be constructed, or alter or cause to be altered, any public sewer, lateral sewer, house connection or industrial connection sewer, sewage pumping plant, pollution control plant, or other sewerage facility in the city where existing or proposed wastewater flows will discharge directly or indirectly to city facilities without first obtaining approval of the sewerage construction from the city. This subsection shall not apply to duly authorized city employees or persons contracted to the city to perform the work for the city.

B. Permit Required for Construction of Sewer or Sewer Connection. No person shall construct a building sewer or lateral sewer or make any connection with or opening into, use, alter, or disturb any public sewer or appurtenances or perform any work on any lateral or building sewer without first obtaining a written permit from the city planning department and paying all fees and connection charges.

C. A person legally entitled to apply for and receive such a permit shall make application on forms provided by the city for that purpose. The applicant shall give a description of the character of the work to be done, and the location, ownership, occupancy, and use of the premises related to the work. The director of engineering may require plans, specifications, or drawings, and such other information as the director of engineering may deem necessary in their professional judgment.

D. If the director of engineering determines the plans, specifications, drawings, description, and information furnished in connection with the application are in compliance with this code and the ordinances, rules, and regulations governing the proposed work and installation, the director shall issue the permit upon payment of the required fees and charges. The director of engineering may attach conditions to the permit which are reasonably necessary to ensure compliance with this code and the ordinances, rules, and regulations governing the proposed work and installation.

1. Applications. Each applicant for connection may be required to sign, on a form provided by the city, an application which shall set forth:

- a. Date and place of application;
- b. Location of premises to be served;

- c. Date the applicant will be connected to the sewer system;
- d. Whether the premises have been heretofore supplied with sewer service by the city;
- e. Purpose for which service is to be used;
- f. Address to which bills are to be mailed or delivered;
- g. Whether applicant is owner or agent for the premises;
- h. Such other information as the city may reasonably require.

E. Material Change. Whenever any material change is made in the size, character or extent of the utilizing equipment or operations for which the city is supplying sewer service, the owner shall be responsible for giving and shall immediately give the director of public works written notice of the extent and nature of the change.

F. Failure to File. Failure by any person to file his application, containing the information required by this chapter, shall constitute a violation of this chapter. No application shall be conclusive as to the matters therein set forth nor shall the filing of any application preclude the city from collecting from the owner responsible for payment (as provided in this chapter) by appropriate action, such sum as is actually due and payable for sewer service under the provisions of this chapter. Each application shall be subject to verification by the director of public works.

G. Written Contract. The city may require a written contract with any person as a condition precedent to sewer service in any case where unusual quantities of water or construction of special facilities are or will be required.

H. Compliance with Permit. After issuance of the permit, no change shall be made in the location of the sewer, the grade, materials, or other details from those described in the permit and as shown in the approved plans and specifications for which the permit was issued nor any deviation shall occur from any condition attached to the approved permit except with written authorization from the director of engineering, the inspector, or other duly authorized city employee.

I. Agreement. The applicant's signature on an application for a permit pursuant to this section shall constitute an agreement by the applicant and any person whom the applicant represents in connection with the application to comply with the terms, requirements, and conditions of this code, the ordinances, rules, and regulations governing the proposed work and installation, with the approved plans and specifications for the work, if any, and with the conditions placed on the permit as well as any corrections or modifications which may be ordered or permitted by the city. This agreement shall be binding on the successors and assigns of the applicant and the persons whom the applicant represents in connection with the application.

J. Costs Paid by Owner. All costs and expenses incident to the installation and connection of any sewer or other work for which a permit has been issued pursuant to this section shall be borne by the owner of the premises to be served by the work. The owner shall indemnify the city and its officers and employees from any loss or damage which may directly or indirectly be caused by the work.

K. Additional Permits. The persons seeking to do the work under a permit issued pursuant to this section shall be solely responsible for obtaining all other permits from any agency or permission from any person necessary to performing the work, including any excavation or encroachment permit from the city.

L. Liability. Neither the city, nor any of its officers, employees, or agents, shall be answerable for any liability for injury or death to any person or damage to any property arising during or growing out of the performance of work performed under any permit issued pursuant to this section. The permit holder shall be answerable for and save the city, its officers, employees, and agents harmless from any liability imposed by law upon the city, its officers, employees, and agents, and from any claims which may be made against the city, its officers, employees, and agents, including all costs, expenses, attorney's fees, fees, and interest incurred in defending any such liability or claims. The permit holder shall be responsible for any defects in the design or performance of work under the permit or any failure which may develop in that work.

M. Beneficial Sewer Extension. If the construction of any sewer extension is otherwise than by means of assessment district proceedings and the director of public works finds such sewer extension, when so constructed, will potentially serve any property of any person other than the person paying the cost of construction thereof, then partial reimbursement of the cost of such construction from premises deriving direct connection benefit may be affected as follows:

1. Any person proposing to construct such sewer extension may apply in writing to the director of public works prior to commencement of construction for a certificate of entitlement to reimbursement. If the director of public works finds such sewer extension may reasonably be expected to benefit the property of any person other than the person proposing to construct such sewer extension, the director of public works shall recommend in writing to the city manager that a certificate of entitlement to reimbursement be granted to the applicant. If the city manager concurs in the director of public works' recommendation, he shall, in writing, declare such applicant is entitled to partial reimbursement of his construction costs and shall authorize the issuance to such applicant of a certificate of entitlement to reimbursement in compliance with this subsection.

2. Thereafter, partial reimbursement of the cost of those portions of any on-site and off-site trunk sewer facilities required to be constructed as part of and by such development, and which are greater or in excess of the minimum size or capacity required to serve that particular development, shall be made by payment to such applicant of a portion of such funds as are thereafter paid to the city for connection charges, and until such date as the cost of such facilities (less credits made for connections by such applicants or his successors in interest) is fully

reimbursed, or until no more than fifteen years have elapsed from the date of completion of construction of such sewer extension, whichever date is earlier, the amount of reimbursement shall not exceed the increment or unit of reimbursement established by resolution of the city council pursuant to this chapter.

3. In each such case, the cost of such sewer extension shall be determined by the director of public works after submission to him of an itemized statement of all of the costs of construction thereof. In the event of disagreement between the director of public works and the applicant, the applicant may appeal as provided in this chapter.

4. In any case where the applicant for a certificate of entitlement to reimbursement is other than an individual, the city reserves the right to require a payee in such certificate to act for and on behalf of all persons interested in the reimbursement.

N. Sewer Extensions and Installations. All sewer extensions and installations paid for by applicants (excepting house sewers) and all facilities furnished by the city, whether located wholly or partially on public or private property, shall, upon acceptance by the city, be and remain the property of the city, which shall have the right to repair, replace and maintain the same and the right to remove the same upon discontinuance of service. The director of public works or other duly authorized agent of the city shall have at all reasonable times the right of ingress to and egress from any premises for any purpose properly relating to the furnishing of sewer service to such premises or for the purpose of determining whether or not any violation of this chapter is occurring on such premises.

O. Loss or Damage. The city shall not be responsible for any loss or damage caused by a negligent or unlawful act of any person in installing, maintaining, supplying or using any appliance, facilities or equipment for which sewer service is furnished by the city.

P. Sewer and Connections in Good Order. Each owner shall keep his house sewer and connections in good order at his own expense and shall be held responsible for damage to any of the city's property comprising any part of the sewer system or any other public facilities which results from use or operation of any appliances or facilities including, without limiting the generality of the foregoing, damage caused by steam, hot water or chemicals.

Q. It shall be a violation of this chapter for any person to tamper with any of the property comprising the sewer system or to place upon or about any such property any building material or other substance which prevents free access to the same.

R. Prepayment Pending Appeal. Pending decision upon any appeal relative to the amount of any charge under this chapter, the person making such appeal shall pay such charge. After the appeal is heard, the council shall order refunded to the persons making such appeal such amount, if any, as the council may determine should be refunded. (Ord. 808 § 1 (part), 2005)

13.04.055 Construction requirements.

A. Minimum Size. The minimum size of a building sewer shall be six-inch diameter. However, in any building designed or to be used exclusively for residential occupancy of six dwelling units or less, the minimum size shall be four-inch diameter. The director may order or authorize a different size of building sewer consistent with the California Plumbing Code as amended by this code.

1. The requirements of this subsection shall not apply retroactively, but any replacement of an existing sewer shall conform to all current city codes.

B. Public Safety. All excavations for a lateral sewer installation shall be adequately guarded with barricades or lights so as to protect the public from hazard. Any public property disturbed in the course of the work shall be restored to a condition as good as, or better than what existed before the work began.

C. All abandoned septic tanks and cesspools must immediately be filled with solid matter or substance which meets with the approval of the director of public works. (Ord. 808 § 1 (part), 2005)

13.04.060 Installation of backwater protection.

A. Installation of Backwater Valve. Whenever any drainage fixture unit is to be installed in new property, the property owner shall obtain and file with the building official at the time of application for a building permit for the fixture unit a written certification by a licensed professional determining whether an inadequate height differential situation exists on the real property. If such a situation exists, the property owner shall provide the backwater protection or permanently remove the drainage unit fixture or fixtures which have an inadequate height differential before completion of installation of the additional drainage unit fixture.

B. Addition of Drainage Unit Fixture. Whenever any drainage fixture unit is to be added to real property, the property owner shall obtain and file with the building official at the time of application for a building permit for the fixture unit a written certification by a licensed professional determining whether an inadequate height differential situation exists on the real property. If such a situation exists, the property owner shall provide the backwater protection or permanently remove the drainage unit fixture or fixtures which have an inadequate height differential before completion of installation of the additional drainage unit fixture.

C. Proof of Previous Installation. Instead of providing certification, a property owner may file a certification from a licensed professional demonstrating backwater protection as approved by the building official has been installed on the property's sewage drainage system and is fully operable. This certification is subject to inspection confirmation by the city.

D. Maintenance. Property owners are responsible for ensuring backwater protection is properly maintained and functioning at all times. Backwater protection is subject to inspection by the city at any reasonable time, and failure to properly install and maintain this protection may result in suspension of sewer service.

E. Compliance with Chapter 13.04. Any installation of backwater protection or modification to any sewer shall be performed and inspected under the requirements of this chapter and established city procedures. (Ord. 808 § 1 (part), 2005)

13.04.065 Construction inspection.

A. Construction Inspection. All sewer construction work, building sewers, plumbing and draining systems shall be inspected by an inspector authorized by the city to insure compliance with all city requirements. No sewer shall be covered until it has been inspected and passed. No sewer shall be connected to the city's public sewer until the work encompassed within the applicable permit has been completed, inspected and approved by the city inspector. If the test proves satisfactory and the sewer has been cleaned of all debris accumulated from construction operations, the inspector shall issue a certificate of satisfactory completion.

B. It shall be the duty of the person doing the work authorized by permit to notify the department the work is ready for inspection. This notification shall be given at least twenty-four hours before the work is to be inspected. The person doing the work shall ensure the work will stand the tests required by the city before making a request for inspection.

C. All building sewers and lateral sewers shall be tested in the presence of the city inspector by filling the line with water or air and inspecting for excessive leakage. Fittings, plugs, water, and labor for testing shall be furnished by the person constructing the sewer. If the existing lateral is to remain, it shall be tested as specified above. All lines showing excessive leakage shall be repaired or replaced at the sole expense of the person controlling the work to the satisfaction of the city inspector.

D. When work has been inspected pursuant to this section and the work has not passed, a written notice to that effect will be given instructing the owner of the work to repair the sewer or other work authorized by the permit in accordance with the permit requirements. (Ord. 808 § 1 (part), 2005)

13.04.070 Maintenance of sewer laterals.

A. The city shall not be responsible for maintenance of any lateral sewer unless the lateral sewer conforms to the requirements of this chapter and other applicable city regulations.

B. The city shall not be responsible for the maintenance of any lateral sewer for commercial, industrial, community, contractor and/or institutional sewer service.

C. Each residential property owner will be required to pay a monthly fee for the maintenance, repair and/or replacement of the portion of the sanitary sewer lateral located between the property line and the main line.

D. Each residential property owner shall keep his or her house sewer and connections in good order and at their own expense.

E. Each residential property owner shall be held responsible for any physical damage to any of the city's property comprising any part of the sewer system.

F. Each residential owner, when required, will be required to have installed an approved cleanout device at or within close proximity to the property line.

G. The limit, without written approval of the director of public works, for any one sewer lateral repair is ten thousand dollars. (Ord. 808 § 1 (part), 2005)

13.04.075 Limitation on point of discharge.

A. No person shall discharge, cause or allow or permit to be discharged any substance into a manhole or other opening in a community sewer except through an approved building sewer, unless that person has first obtained a permit to do so from the city.

B. No person shall discharge, cause or allow or permit to be discharged any sewage, industrial waste, or other polluted waters into any storm drain or natural outlet or creek or stream or channel without first obtaining a valid national pollutant discharge elimination system (NPDES) permit. (Ord. 808 § 1 (part), 2005)

13.04.080 Prohibited activities.

No person shall maliciously, wilfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is part of the sewerage works or any sampling device. (Ord. 808 § 1 (part), 2005)

13.04.085 Generally prohibited wastes.

A. No person shall discharge or cause to be discharged to a public sanitary sewer any substance or waste containing substances or has characteristics either alone or by interaction with other wastewaters cause or threaten to cause interference or pass-through.

B. No person shall discharge to any public sewer any wastes, if in the opinion of the city, those wastes may have any adverse or harmful effect on sewers, maintenance personnel or equipment, wastewater treatment personnel or equipment, treatment plant effluent quality, public or private property, aquatic life in any waters receiving effluent from the sanitary sewer system, or create a hazard in the use or disposal of sewage sludge, or may otherwise endanger the public, the local environment, or create a public nuisance.

C. No person shall discharge or cause to be discharged to a public sewer any waste creating a stoppage, plugging, breakage, any reduction in the sewer capacity, or any other damage to sewers or sewerage facilities of the city. (Ord. 808 § 1 (part), 2005)

13.04.090 Specifically prohibited wastes.

No person shall discharge or cause to be discharged to a public sanitary sewer any of the following wastes:

A. Any wastewater containing any flammable liquid, solid, vapor, or gas or other substance including, but not limited to, any substance having a closed cup flashpoint of less than one hundred forty degrees Fahrenheit or sixty degrees Celsius, using the test methods specified in 40 CFR Section 261.21. Prohibited materials include but are not limited to gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides, and any other substances the city, the state, or the EPA has notified the user is a fire or explosive hazard or a hazard to the system;

B. Any waste having a pH lower than 5.5, higher than 9.0, or having any corrosive or detrimental characteristic which may cause injury to any person operating, maintaining, repairing, or constructing the sanitary sewer system or any part thereof, or working in or about the sanitary sewer system, or any damage to any part of the sanitary sewer system, or any waste with a pH high enough to cause alkaline incrustations on sewer walls;

C. Any solids or viscous substances of such size or in such quantity they may cause flow obstruction in any part of the sewer or be detrimental to proper wastewater treatment plant operations. Such substances include but are not limited to, asphalt, cement, dead animals, offal, ashes, sand, mud, straw, industrial process shavings, metal, glass, rags, feathers, tar, plastics, wood, whole blood, paunch manure, bones, hair and flesh, entrails, paper dishes, paper cups, milk containers, or similar paper products, either whole or ground, and resins;

D. Any wastes with excessively high BOD, COD, or decomposable organic content which will cause interference with the sanitary sewer system;

E. Any waste containing heat in amounts which will inhibit biological activity at the POTW resulting in interference, but in no event, no liquid, solid, vapor, gas, or thing having or developing a temperature of one hundred fifty degrees Fahrenheit or more, or may cause the temperature at the POTW to exceed one hundred four degrees Fahrenheit;

F. Any nonbiodegradable cutting oils, commonly called soluble oil;

G. Any petroleum oil, nonbiodegradable oil, or refined petroleum product;

H. Any waste containing toxic or poisonous solids, liquids, or gases in such quantity that alone, or in combination with other waste substances, may create a hazard to humans, animals, or the local environment, interfere with the wastewater treatment processes, cause a public nuisance, or cause any condition hazardous to health and safety in the sewerage system;

I. Any substance promoting or causing the promotion of toxic gases;

J. Any waste requiring an excessive quantity of chlorine or other chemical compound used for disinfection purposes;

K. Any excessive amounts of chlorinated hydrocarbon or organic phosphorous type compounds;

- L. Any excessive amount of deionized water, steam condensate, or distilled water;
- M. Any wastewater producing excessive discoloration of wastewater or treatment plant effluent, such as dye wastes and vegetable tanning solutions;
- N. Any wastes containing excessive quantities of iron, boron, chromium, phenols, plastic resins, copper, nickel, zinc, lead, mercury, cadmium, selenium, arsenic, or any other objectionable materials toxic to humans, animals, the local environment, or to the biological or other wastewater;
- O. Any blowdown or bleed water from cooling towers or other evaporation coolers exceeding one-third of the make-up water;
- P. Any single pass cooling water;
- Q. Any quantities of radioactive material wastes;
- R. Recognizable portions of the human anatomy;
- S. Any strongly odorous waste or waste tending to create odors;
- T. Any waste containing greater than 0.1 mg/L of dissolved sulfides; or
- U. The use or addition of any chemical or biological agent used for the maintenance of grease traps and interceptors. This includes enzymes, emulsifiers and bacterial cultures. (Ord. 808 § 1 (part), 2005)

13.04.095 Prohibition on trucked and hauled wastes.

No person shall discharge, cause, allow or permit any trucked or hauled waste to be discharged into the sanitary sewer system, except at a site specifically designated in a wastewater discharge permit issued pursuant to this chapter. (Ord. 808 § 1 (part), 2005)

13.04.100 Prohibition on garbage.

A. No person shall discharge, deposit, or throw, or cause, allow or permit to be discharged, deposited, or thrown into the sanitary sewer system, or any part thereof, any garbage, or any fruit, vegetable, animal or other solid material from any food-processing plant or other industrial plant, food establishment or restaurant, or retail grocery store, irrespective of whether or not it shall have been first passed through a mechanical grinder.

B. No person shall install, operate, use or maintain upon the premises of any food-processing plant, or any other industrial plant or retail grocery store, any mechanical grinder or waste grinder which is connected directly or indirectly to the sanitary sewer system, or any part thereof. (Ord. 808 § 1 (part), 2005)

13.04.105 Prohibition on use of diluting waters.

The use of diluting waters as a partial or complete substitute for adequate treatment, to achieve compliance, or to meet local limitations for wastewater as set forth in this chapter, or to avoid or minimize any requirements imposed in a wastewater discharge permit is prohibited. (Ord. 808 § 1 (part), 2005)

13.04.110 Suspended solids—Dissolved matter.

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid containing suspended solids or dissolved matter of such character and quantity requiring unusual attention or expense to handle, process, or treat such matter at the plant. (Ord. 808 § 1 (part), 2005)

13.04.115 Limitations on wastewater strength.

A. The director of public works shall develop and implement local limits necessary to assure compliance with the city's NPDES permit and to prevent the pass-through of any pollutants causing a violation of the permit or cause interference with the POTW.

B. No person shall discharge, cause, allow, or permit to be discharged into a public sanitary sewer or any part thereof, any waste containing an excess in concentration of established local limits.

C. No person shall discharge, cause, allow, or permit to be discharged into a public sanitary sewer or any part thereof, any waste containing an excess in concentration of established federal pretreatment or state limits.

D. These limitations are subject to amendment at any time, as adopted by resolution of the city council.

E. No permit granted under this chapter shall constitute any vested right of any kind to continue to maintain concentrations at this or any other level.

F. The pollutant limitations may be allocated among industrial users as:

1. Uniform concentration limits; or as
2. The ratio of the total mass per user; or as
3. A selected industry reduction; or by

4. Such other method considering factors such as persistence of the pollutant, equity, treatment feasibility, economic feasibility, economies of scale, pollution prevention, waste minimization measures, anticipated growth and enforcement feasibility. (Ord. 808 § 1 (part), 2005)

13.04.120 Limitation on other pollutants.

No person shall discharge or cause or allow or permit to be discharged any pollutant, including oxygen demanding pollutants to be released at a flow rate or a pollutant concentration, or both, which a user knows or has reason to know will cause interference to the POTW. In no event shall a person discharge or cause or allow or permit a discharge to have a slug load with a flow rate or contain a concentration or qualities of pollutants which exceeds for any time period of more than five times the average twenty-four hour concentration quantities or flow during normal operation. (Ord. 808 § 1 (part), 2005)

13.04.125 Holding tank wastes.

A. No person shall discharge any holding tank waste into a community sewer unless that person has obtained a permit to do so from the city. Unless otherwise specifically allowed under the terms of a city permit, a separate permit shall be required for each separate discharge.

B. No person shall discharge or cause or allow or permit to be discharged directly or indirectly to a public sewer any wastes originating from a recreational vehicle, boat, camper, mobilehome, trailer, portable toilet, chemical toilet, or any temporary or mobile sanitation facility except pursuant to permit issued by the city at a facility designed and operated for this type of discharge.

C. No person, corporation or other legal entity may dispose of residential septic tank, cesspool or holding tank wastes into the city system without the approval of the director of public works and satisfying the following conditions and paying the following fees:

1. Register with the Contra Costa County Health Department and obtain a county permit;
 2. Pay the city of Brentwood an annual permit in the amount specified in the current fee schedule, payable on January 1st of each year;
 3. Pay as billed, the charge per gallon dumped as established by resolution of the city council of the city of Brentwood;
 4. Dump only at the city wastewater treatment plant between the days and hours set by the director of public works; and
 5. When the wastewater operations staff or designated representative is present.
- (Ord. 808 § 1 (part), 2005)

13.04.130 Stormwaters, surface water, groundwater.

A. No person shall discharge, cause or allow or permit any stormwater, roof or yard drainage, foundation, under-drainage, or groundwater to be discharged into the sanitary sewer system without first obtaining a permit from the director of public works to do so. Such a permit

shall only be granted in exceptional cases of public necessity when no other reasonable alternative is available.

B. All sewer laterals or sewer cleanouts which contain leaks or breaks, uncapped sewer cleanouts, sump pumps, downspouts or yard drains which discharge into the sewer system, and all other sources of accidental, negligent or intended introduction of storm runoff or similar waters into the sanitary system are declared to be a public nuisance, and shall be abated by the owner of the property, who is required to remove or correct such improper sewer connections.

C. Whenever any such improper sewer connection exists upon any private property or in any street or alley within the city, the city council shall pass a resolution declaring the same to be a public nuisance, and order the director of public works to give notice of the passage of such resolution as herein provided and stating therein that unless such nuisance is abated without delay, the work of doing so will be done by the city and the expense thereof assessed upon the property from which the nuisance is removed. Such resolution shall fix the time and place for hearing any objections to the proposed correction or removal.

D. At the time stated in the notice, the city council shall hear and consider any and all objections to the proposed corrections of improper sewer connections and may continue the hearing from time to time.

E. Upon the conclusion of such hearing, the council by motion shall allow or overrule any or all objections, if any, after which the council shall thereupon be deemed to have acquired jurisdiction to proceed and perform the work of correction of the improper sewer connection. The action of the council at the conclusion of such hearing shall be final and conclusive. (Ord. 808 § 1 (part), 2005)

13.04.135 Medical wastes.

A. Hospitals, medical clinics, offices of medical doctors, and convalescent homes may discharge to the sanitary sewer system through a city-approved grinder installation with inlet size and design features suitable for its intended use and so construct that all particles pass through a maximum three-eighths-inch opening wastes of the following category:

1. Infectious wastes defined as follows:
 - a. Laboratory and surgical operating room wastes except as excluded in subsection B of this section;
 - b. Wastes from outpatient areas and emergency rooms similar to those included in subsection (A)(1)(a) of this section with the same exclusions; and
 - c. Solid wastes generated in the rooms of patients who are not isolated because of a suspected or diagnosed communicable disease.

B. In no event shall any person discharge, or cause or allow or permit the following wastes to be discharged to the sewer by any means:

1. Equipment, instruments, utensils, and other materials of a disposable nature which may harbor or transmit pathogenic organisms and are used in the rooms of patients having a suspected or diagnosed communicable disease which by the nature of the disease is required to be isolated;

2. Any recognizable portions of the human anatomy;

3. Wastes excluded by other provisions of this chapter except as specifically permitted pursuant to subsection (A)(1)(a) of this section; or

4. Any solid waste not specifically described in subsection (A)(1)(a) of this section. (Ord. 808 § 1 (part), 2005)

13.04.140 Quantity of wastes.

The rate of discharge of industrial wastes to the sewer system shall be limited to the capacity of the lateral and main sewers flowing as open-channel conduits. Facilities shall be provided for dampening or equalizing “slug” discharges in order to comply with concentration restrictions as defined in this chapter. (Ord. 808 § 1 (part), 2005)

13.04.145 Refusal of service and disconnection.

A. The city may refuse to furnish sewer service and may discontinue all services to any premises where apparatus, appliances or equipment using water is found by the director of public works to be dangerous or unsafe or where the use of water on such premises is found by the director of public works to be detrimental or injurious to the sewer service furnished by the city to other premises, or where the director of public works finds negligent or wasteful use of water exists on any premises which affects the city’s sewer service. The city shall have the right to refuse or discontinue sewer service to any premises if necessary to protect itself against fraud or abuse.

B. In the event of violation of any provision of this chapter, the city may disconnect any premises from the sewer system after first notifying in writing the person causing, allowing or committing such violation, specifying the violation and, if applicable, the time after which (upon the failure of such person to prevent or rectify the violation) the city will exercise its authority to disconnect the premises from the sewer system; provided, such time shall not be less than five days after the deposit of such notice in the United States post office at Brentwood, Contra Costa County, California, addressed to the person to whom notice is given; provided, however, in the event such violation results in a public hazard or menace, then the city may enter upon the premises without notice and do such things and expend such sums as may be necessary to abate such hazard; and the reasonable value of the things done and the amounts expended in so doing shall be a charge upon the person so in violation.

C. Upon failure of the owner or occupant of any premises to pay any sewer service charges prior to delinquency, or if the owner or occupant of any premises violates any other provision of this chapter, any one or more of the following actions authorized by this subsection may, or where required by this chapter, must be taken by the city to enforce such payment:

1. In each case where all or any part of a bill becomes delinquent, penalty rates applicable to delinquent charges as established by council resolution shall apply to delinquent sewer service charges.

2. In each case where any bill for sewer service remains unpaid after such bill becomes delinquent, and in each where a violation of any other provision of this chapter continues for a period of sixty days, the city may, in addition to any other remedies it may have, disconnect from the city sewerage system the premises in violation of this code, and in the alternative or in addition thereto, cut off or disconnect any water service or other services provided or furnished to the premises by the city. Whenever premises have been disconnected from the sewer system for nonpayment of sewer service charges, such premises shall not be reconnected to the sewer system until: all delinquent charges and penalties have been paid; until written permission from the director of public works has been obtained; a sewer connection fee equal to the actual cost to the city of such disconnection; and until the owner and/or occupant of such premises has otherwise complied with this chapter. The city shall have the right to require any person liable to pay any charge herein fixed to make a reasonable deposit with the city to insure collection of the charges herein fixed.

3. In each case where premises are disconnected from the sewer system, the city shall take such steps as may be legally taken to abate such premises and to prohibit occupancy of such premises until they are reconnected to the sewer system.

D. The city, the council and all proper city officers, agents or employees shall promptly, efficiently and economically take all steps, actions or remedies necessary for the collection of charges and penalties thereon as provided in this chapter which are now or may hereafter be provided for in the law. Such remedies for collecting and enforcing such charges set forth in the law are cumulative and may be pursued alternately, or any thereof may be used consecutively. (Ord. 808 § 1 (part), 2005)

13.04.150 Pretreatment of industrial waste.

A. An industrial wastewater pretreatment system or device may be required by the city to treat industrial flows prior to discharge to the sewer when it is necessary to restrict or prevent the discharge to the sewer of certain waste constituents, to distribute more equally over a longer time period any peak discharges of industrial wastewaters or to accomplish any pretreatment result required by the city. All pretreatment systems or devices shall be approved by the city but such approval shall not absolve the industrial discharger of the responsibility of meeting any industrial effluent limitation required by the city, county, state, or federal government. In special cases, the city may require construction of sewer lines by the discharger to convey certain industrial wastes to a specific city trunk sewer. All pretreatment systems

judged by the city to require engineering design shall have plans prepared and signed by an engineer of suitable discipline licensed in the state.

B. Normally, a gravity separation interceptor, equalizing tank neutralization chamber and control manhole will be required respectively to remove prohibited settleable and floatable solids, to equalize wastewater streams varying greatly in quantity and/or quality, to neutralize low or high pH flows and to facilitate inspection, flow measurement and sampling. Floor drains from commercial or manufacturing buildings, warehouses, multiuse structures, or areas where any waste requiring pretreatment is involved shall not discharge directly into the sewer, but shall first discharge to a gravity separation interceptor. Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at owner's expense.

C. The city may adopt additional rules and regulations by resolution, after a public hearing, for administration of this section.

D. No person shall discharge into the sewer system any material which includes petroleum by products, or any combustible material, or any other material in such quantity as is determined by the director of public works to be hazardous or injurious to the sewer system or its operation.

E. Any petroleum-contaminated groundwater shall be processed through an activated carbon pretreatment system approved by the city prior to discharge to the sanitary sewer system. This discharge shall only be done under permit. (Ord. 808 § 1 (part), 2005)

13.04.155 Grease removal devices required.

A. Any type of business or establishment where grease or other objectionable materials may be discharged into a public or private sewage main or disposal system shall have a grease removal device of a size and design approved by the director. The requirements in this chapter are in addition to any applicable requirements of the Uniform Plumbing Code and the city of Brentwood standard plans and specifications.

B. New Facilities. On or after the effective date of the ordinance codified in this chapter, food service facilities which are newly proposed or constructed, or existing facilities which will be expanded or renovated to include a food service facility, where such facility did not previously exist, shall be required to install, operate and maintain a grease interceptor or grease trap according to the requirements contained in this chapter. Grease interceptors or grease traps shall be installed and permitted prior to the issuance of a certificate of occupancy.

1. Grease traps shall be prohibited for new food service facilities, except for those facilities where inadequate space is available for the installation of a grease interceptor. The installation of a grease trap instead of a grease interceptor at a new food service facility must be done with the approval of the director of public works.

C. Existing Facilities. For the purposes of sizing and installation of grease interceptors, all food service facilities existing within the city prior to the effective date of the ordinance codified in this chapter shall be permitted to operate and maintain existing grease interceptors or grease traps provided their grease interceptors or grease traps are in efficient operating condition. On or after the effective date of the ordinance codified in this chapter, the city may require an existing food service facility to install, operate and maintain a new grease interceptor or trap complying with the requirements of this chapter or to modify or repair any noncompliant plumbing or existing interceptor or trap within ninety days of written notification by the city when any one or more of the following conditions exist:

1. The facility is found to be contributing oils and grease in quantities sufficient to cause line stoppages or necessitate increased maintenance on the wastewater collection system.
2. The facility does not have a grease removal device.
3. The facility has an undersized, irreparable or defective grease interceptor or trap.
4. Remodeling of the food preparation or kitchen waste plumbing system is performed which requires a plumbing permit to be issued by the city of Brentwood.
5. The existing facility is sold or undergoes a change of ownership.
6. The existing facility does not have plumbing connections to a grease interceptor or trap in compliance with the requirements of this chapter.
7. The facility fails to submit a completed application form for a grease discharge permit within sixty days after the date of the receipt of an application form by the city of Brentwood.
8. The facility has not operated as a food service facility for twelve consecutive months prior to receiving the grease discharge permit application form.

D. Each grease removal device shall be so installed and connected it shall be at all times easily accessible for inspection, cleaning and removal of grease.

E. The grease removal device should be situated on the discharger's premises but when such a location would be impractical or cause undue hardship on the discharger, the city may issue an encroachment permit to allow the device to be installed in the public street or sidewalk area and located so it will not be obstructed by landscaping or parked vehicles. However, such a device shall not at any time pose a hazard or obstruction to public use of the street or sidewalk area.

F. Waste discharge from fixtures and equipment in establishments which may contain grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, soup kettles, and floor drains located in areas

where such objectionable materials may exist, may be drained into the sanitary waste through the grease removal device when approved by the director provided:

1. Toilets, urinals, wash basins and other fixtures containing fecal material shall not flow through the grease removal device;

2. Grease removal devices shall be located upstream of any dishwashers or discharges exceeding one hundred ten degrees Fahrenheit.

G. Grease removal devices shall be maintained in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals to dissolve grease is specifically prohibited. No accumulated grease shall be introduced into any drainage piping or public or private sewer. Users with oil and grease removal devices shall maintain them in good operating condition at all times.

H. Grease Removal Device. Grease interceptors and traps shall conform to the standards in the Plumbing and Drainage Institute (PDI) Standards G101. Grease interceptors and traps shall be installed in strict accordance with the manufacturer's instructions. Grease interceptors and traps shall be equipped with a cover which can be opened for inspection and sampling and a mechanism for a secure closing.

1. Grease Removal Design and Location. Grease removal device shall have a minimum of two compartments and shall be capable of separation and retention of grease and storage of settled solids. Design shall conform with the most current requirements as published by the Uniform Plumbing Code and any city of Brentwood standard plans and specifications.

2. The grease removal device must have a control manhole over each compartment or designed in such a way for monitoring purposes. This shall be required and installed at the owner's/operator's sole expense.

3. Covers shall have a gas-tight fit.

4. The grease interceptor shall be designed, constructed and installed for adequate load-bearing capacity.

5. Interceptors shall be installed in a location outside of the building which provides easy access at all times for inspections, cleaning and proper maintenance, including pumping.

I. Grease Removal Device Capacity. Grease interceptor capacity calculations shall be performed by each food service facility.

1. The correct grease removal device will be based on size and type of operation according to the formula contained in Table 1003.4.1 and Table 1003.5.1 of the California Uniform Plumbing Code and the sizing methods contained in the most current published Plumbing and Drainage Institute (PDI), where applicable.

2. Minimum capacity of any one unit shall be:
 - a. Interceptors shall be seven hundred fifty gallons as required by the Uniform Plumbing Code and maximum capacity shall be one thousand five hundred gallons.
 - b. Grease trap shall be a minimum of forty pounds in size or as required by the Uniform Plumbing Code. Any deviation from this requirement will be needed to be approved by the director of public works.
 - c. Where sufficient capacity cannot be achieved with a single unit, installation of grease interceptors in series is required.
 - d. Grease removal device capacity calculations shall be approved by the director of public works prior to the installation of the device. The capacity of the grease removal device required for food manufacturing or processing facilities which are not covered by the Uniform Plumbing Code shall be approved by the director of public works according to the mass and type of food prepared, the wastewater volume produced from food preparation or manufacture, total hours of operation per day and a load factor depending on the installed equipment.
- J. Flow-through Rate. Flow-through rates shall be calculated in accordance with the procedures in the Uniform Plumbing Code's most current edition.
- K. Flow Control Device. Grease interceptors or traps shall be equipped with a device to control the rate of flow through the unit. The rate of flow shall not exceed the manufacturer's rated capacity recommended in gallons per minute for the unit.
- L. Venting. The flow-control device and the grease removal device shall be vented in accordance with the Uniform Plumbing Code's most current edition, when required. The vent shall terminate not less than six inches above the flood-rim level or in accordance with the manufacturer's instructions. (Ord. 808 § 1 (part), 2005)

13.04.160 Grease trap inspection, maintenance, cleaning.

- A. Grease Trap Inspection, Cleaning and Maintenance. Each food service facility shall be solely responsible for the cost of trap installation, inspection, cleaning and maintenance. Each food service facility may contract with a grease hauler who has been permitted by the city for cleaning services or it may develop a written protocol and perform its own grease trap cleaning and maintenance procedures. Any permitting cost associated with grease trap inspection shall be set by council resolution. Cleaning and maintenance must be performed when the total volume of captured grease and solid material displaces more than twenty-five percent of the total volume of the unit. Each food service facility shall determine the frequency at which their grease trap shall be cleaned, but all grease traps shall be opened, inspected, cleaned and maintained at a minimum of once per week.
- B. Inspection. Grease traps may be inspected by the city as necessary to assure compliance and to assure proper cleaning and maintenance schedules are being adhered to.

C. Repairs. The food service facility shall be responsible for the cost and scheduling of all repairs to its grease trap(s). Repairs required by a city shall be completed within fourteen calendar days after the date of written notice of required repairs is received by the facility, unless the city approves in writing of a different schedule.

D. Disposal. Grease and solid materials removed from a grease trap shall be disposed of in the solid waste disposal system.

E. Recordkeeping. The food service facility shall maintain complete and legible records of the date and time of all cleaning and maintenance of each grease trap in a bound logbook and shall make this book available for inspection by the city on demand. Records shall be retained for a period of not less than three years. The facility shall also maintain the written protocol concerning grease trap cleaning and maintenance procedures and shall make this available to the city on demand. (Ord. 808 § 1 (part), 2005)

13.04.165 Grease interceptor inspection, maintenance, cleaning.

A. Grease Interceptors Inspection, Pumping and Maintenance. Each food service facility shall be responsible for the costs of installing, inspecting, pumping, cleaning and maintaining its grease interceptor. All food service facilities which have grease interceptors shall utilize a grease hauler who has been permitted by the city for pumping services. Pumping services shall include the initial complete removal of all contents, including floating materials, wastewater and bottom sludge and solids from the interceptor. The return of gray water back into the grease interceptor from which the wastes were removed is allowable, provided grease and solids are not returned to the interceptor and further provided the grease hauler has written authorization from the food service facility to return the gray water. Grease interceptor cleaning shall include scraping excessive solids from the walls, floors, baffles and all pipe work. The grease hauler shall wait at least twenty minutes to allow the interceptor waste to separate in the truck tank before attempting to reintroduce the gray water to the interceptor. It shall be the responsibility of each food service facility to inspect its grease interceptor during the pumping procedure to ensure the interceptor is properly cleaned out and all fittings and fixtures inside the interceptor are in working condition and functioning properly.

B. Interceptor Pumping Frequency. Each food service facility shall have its grease interceptor(s) pumped at a minimum frequency of once every calendar month. There shall be a minimum period of three weeks between each required pumping. In addition to required monthly pumping, each food service facility shall determine an additional frequency at which its grease interceptor(s) shall be pumped according to the following criteria:

1. When the floatable grease layer exceeds six inches in depth as measured by an approved dipping method;

2. When the settleable solids layer exceeds eight inches in depth as measured by an approved dipping method;

3. When the total volume of captured grease and solid material displaces more than twenty-five percent of the capacity of the interceptor as calculated using an approved dipping method; or

4. When the interceptor is not retaining/capturing oils and greases; or the removal efficiency of the device, as determined through sampling and analysis, is less than eighty percent.

C. Variance Procedure. If a food service facility determines monthly pumping of their grease interceptor is unnecessary in order to remain in compliance with the criteria in subsection (B)(4) of this section, the facility may make written application for a variance from the monthly pumping requirements to the city of Brentwood environmental compliance department. The variance procedure shall be as follows:

1. The food service facility shall submit an application for a variance on a form provided by the city along with the appropriate application fee. The application shall include the next date and time the facility intends to have its interceptor pumped and cleaned.

2. A city official shall observe the pump-out procedure and inspect the interceptor on the specified date and time.

3. If the interceptor is in good working condition during the initial inspection, the city shall reinspect the interceptor approximately one month after the initial inspection. If there is less than four inches of surface grease and less than six inches of bottom solids at the time of reinspection, the interceptor will not need to be pumped out at that time.

4. After the initial reinspection, the city shall inspect the interceptor at intervals of approximately every ten working days to determine the grease and solids level using a dipping method approved by the city.

5. At the reinspection, when either the level of grease reaches six inches or the level of solids reaches eight inches, the city shall use the number of days from the initial pumping date to the final reinspection date as the new pumping frequency requirement to be included in the variance granted.

6. If, at a reinspection, the level of grease exceeds six inches or the level of solids exceeds eight inches, the city shall use the number of days from the initial pumping date to the previous reinspection date as the new pumping frequency requirement to be included in the variance granted.

7. In any event, pump-out and cleaning of an interceptor shall be required at least once every one hundred eighty days.

8. All staff time and analytical sampling and analysis will at owner's expense.

D. Inspection. Grease interceptors shall be inspected by the city as necessary to assure compliance with the grease management permit and to determine if proper cleaning and maintenance schedules are being adhered to.

E. Repairs. Each food service facility shall be responsible for the cost and scheduling of all repairs to its grease interceptor(s). Repairs required by a GMP official shall be corrected within fourteen calendar days after the date of written notice of requiring the repairs is received by the facility or unless notice from the city establishes a different compliance date.

F. Disposal of wastes removed from each grease interceptor shall be disposed of at a facility permitted to receive such wastes or at a location designated by the city of Brentwood for such purposes. Neither grease nor solid materials removed from interceptors shall be returned to any grease interceptor, private sewer line or to any portion of the city's wastewater collection system.

G. Recordkeeping. Each food service facility shall maintain a bound logbook in which a record of all interceptor maintenance is entered, including the date and time of the maintenance, details of any repairs required and dates of repair completion and any other records pertaining to the interceptor. This logbook shall be made available for review upon request by a city official. Each food service facility shall also maintain a file on-site which contains the following information:

1. The (as-built) drawings of the plumbing system;
2. A copy of the current grease disposal permit;
3. Records of inspections;
4. Copies of required reports;
5. Receipts;
6. Log of pumping activities;
7. Log of maintenance activities;
8. Hauler information;
9. Disposal information;
10. Monitoring data;
11. The file shall be available at all times for inspection and review by the GMP official.

H. Quarterly Reporting. Each food service facility shall submit a quarterly report to the city on a form provided by the city. Reports shall be submitted on or before the last day of March, June, September and December in each year. Each report shall record the number of times the interceptor or trap has been cleaned since the last report and shall indicate the volume of liquids and solids removed on each occasion and the name and address of the grease hauler. If a variance has been granted, the alternate cleaning frequency shall also be reported. Each report shall also note any repairs which have been made to the interceptor or trap including the dates these repairs were completed and the individual or contractor who made the repairs. Reports shall be submitted to the address provided in the permit and shall be deemed to be late and subject to a late fee if they are received by the city more than thirty days after the end of each month specified above.

I. Interceptor Additives. Any chemicals, enzymes, emulsifiers, live bacteria or other grease cutters or additives shall be approved by the director prior to their use by the food service facility or the grease hauler. MSDS sheets and any other applicable information concerning the composition, frequency of use and mode of action of the proposed additive shall be sent to the city together with a written statement outlining the proposed use of the additive(s). Based upon the information received and any other information solicited from the potential user or supplier, the city shall permit or deny the use of the additive in writing. Permission to use any specific additive may be withdrawn by the city at any time.

J. Alternative Grease Removal Devices or Technologies. Alternative devices and technologies such as automatic grease removal systems shall be subject to written approval by the director prior to installation. Approval of the device shall be based on demonstrated (proven) removal efficiencies and reliability of operation. The city may approve these types of devices depending on manufacturer's specifications on a case-by-case basis. The food service facility may be required to furnish analytical data demonstrating grease discharge concentrations to the city's wastewater collection system will not exceed the limitation established in local limits of the city code.

K. Abandoned grease removal devices shall be emptied and filled as required for abandoned septic tanks. (Ord. 808 § 1 (part), 2005)

13.04.170 Screened industrial wastes and recording devices.

A. No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any garbage, or any fruit, vegetable, animal, or other solid industrial wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products.

B. Domestic sewage may be discharged into the sewer system without screening. All industrial waste must be screened through a screen with at least twenty meshes to the lineal inch in each direction.

C. The director of public works may require, either before or after connection of any premises to the sewer system, that the owner or occupant install suitable screening and

pretreatment devices on such premises to prepare industrial waste so the sewer system can adequately treat such waste by the normal treatment processes of the sewer system.

D. All such screening and pretreatment devices shall be installed and maintained at the sole expense of the owner or occupant of such premises and subject to the approval of the director of public works.

E. The director of public works may also require at any time, approved mechanical measuring and recording devices be installed on any premises. All such measuring and recording devices shall be installed and maintained at the sole expense of the owner or occupant of such premises and subject to the approval of the director of public works.

F. The city shall have the right at any time to check the operation of any such screening, pretreatment, measuring or recording device and to read and to make records of all readings of any such measuring or recording device. In any case where any such screening or pretreatment device is installed, the owner or occupant of such premises shall at his own expense remove and dispose of all waste material retained upon the screens and/or not approved by the director of public works for disposal through the sewer system. (Ord. 808 § 1 (part), 2005)

13.04.175 Wastewater discharge permit required.

No person shall discharge, or cause or allow or permit to be discharged any industrial wastewaters directly or indirectly to sewage facilities owned by the city without first obtaining a city permit for industrial wastewater discharge. (Ord. 808 § 1 (part), 2005)

13.04.180 Permit application.

A. Any person seeking a wastewater discharge permit, other permit, or amendment to a permit under this chapter shall complete and file an application on the form prescribed by the director and accompanied by all applicable fees and charges.

B. General Permit. The application shall contain the following information at a minimum:

1. Signature, name, and address of both the owner of the property from which the discharge is to occur and the applicant for the permit if other than the owner. The persons signing the application on behalf of an entity shall be at least of the level of vice president, general partner, or an individual responsible for the overall operation of the facility or property and meeting the conditions of the requested permit, or a person meeting the federal requirements for NPDES applications as specified in Title 40 of the CFR;

2. Volume of wastewater to be discharged;

3. Estimated wastewater constituents and characteristics;

4. Time and duration of discharges;

5. Average and thirty-minute peak wastewater flow rates, including daily, monthly, and seasonal variations, if any;

6. Site plans, floor plans, and mechanical and plumbing plans and details, sufficient to show all sewers and appurtenances by size, location, and elevation;

7. Description of all activities, facilities, and plant processes on the property which may in any way relate to the discharges, including types of materials which are or could be discharged;

8. Each product produced by type, amount and rate of production which may in any way relate to the discharges;

9. Hours of work and activities at the property; and

10. The director may require such additional information as the director needs in order to determine whether the proposed discharge will comply with the requirements of this chapter.

C. Food Service Facility Permitting Program.

1. Each food service facility shall be evaluated to determine whether it falls within the definition of a significant industrial user (SIU). Facilities classified as SIU's shall be subject to permitting.

2. All other food service facilities shall be required to apply for and obtain fats, oil and grease discharge permit (FOGDP) from the city. The city shall approve, deny, or approve with special conditions all applications for FOGDP's in accordance with the policies and regulations established in this chapter. The FOGDP shall be in addition to any other permits, registrations, or occupational licenses which may be required by federal, state or local law.

3. It shall be a violation of this chapter for any food service facility identified by the city to discharge wastewater containing fats, oils and grease to the city's wastewater collection system without a current FOGDP.

4. Application Form. The city shall provide an application form for a FOGDP. The appropriate form shall be sent to all food service facilities identified by the city.

5. All food service facilities required under the terms of this program to obtain a FOGDP shall submit a completed application form for a FOGDP to the city at the address shown on the form within thirty calendar days of receipt of the form. Each application form submitted shall include the following information:

a. Name, address, telephone number and location (if different from the address) of applicant, owner of the premises (if different from the tenant when property is leased) from

which fats, oils and grease are discharged, and the name of a representative duly authorized to act on behalf of the food service facility;

b. A description of the activities, facilities, and plant processes on the premises, including a list of all equipment, raw materials and chemicals used or stored at the facility. Material safety data sheets (MSDS's) of all such chemicals shall be included;

c. A drawing in sufficient detail to show the location of all kitchen equipment producing wastewater, and all sewers, floor drains, sewer connections, grease interceptors and appurtenances in the user's premises if known or if may be readily ascertained;

d. Number of employees, number and times of shifts, and hours and days of facility operation;

e. Copies of recent water bills;

f. Details of all grease interceptor maintenance within the past year;

g. A signed statement that the information provided is accurate, and the applicant agrees to abide by the regulations contained in this chapter, as well as any other applicable federal, state or local regulations governing the food service facility; and

h. Any other information determined by the director to be necessary in order to evaluate the FOGDP application.

D. Waste Haulers.

1. Any person, firm, or business desirous of collecting, pumping or hauling wastes from businesses located within city of Brentwood who does not hold and maintain a current permit shall be required to apply for and obtain a waste hauler permit (WHP) from the city.

2. The director shall approve, deny, or approve with special conditions all applications for WHP's in accordance with the policies and regulations established in this chapter.

3. It is unlawful for any identified waste hauler to clean or pump out pretreatment devices and/or grease interceptors within the city limits without a current waste hauler permit.

4. Application Form. To obtain a WHP, a waste hauler shall submit a completed WHP application form together with the appropriate fee to the city.

5. The waste hauler shall be issued with a WHP within thirty working days of the city's receipt of the completed application form and appropriate fees. The grease hauler shall obtain the WHP prior to providing waste hauling services within the city's wastewater collection system service area. Each application shall include the following information:

a. Name of applicant. If the applicant is a partnership, corporation or other business entity, the name of an individual who legally is able to act on behalf of the organization must be provided;

b. Applicant address and phone number, including information for person(s) to contact at times other than regular business hours;

c. The type, license tag number, and capacity of each vehicle which will be used to pump or haul liquid wastes from grease interceptors. New or replacement equipment acquired subsequent to the application shall be reported to the city prior to use;

d. A copy of a current health department license if the hauler pumps or hauls septic tank waste or portable toilet wastes;

e. Financial assurance in the amount of ten thousand dollars in a form acceptable to the city. Such assurance shall remain in effect for the life of the permit. This assurance shall be used to guarantee disposal costs, fines, and the costs of any damages which may result from a waste hauler discharging in violation of this chapter;

f. A list of the disposal facilities the applicant intends to use;

g. A signed statement that the information provided is accurate, and the applicant agrees to abide by the regulations contained in this chapter, as well as any other applicable federal, state or local regulations governing their activities; and

h. Any other information determined by the permit to be necessary to evaluate the waste hauler's application and may include special conditions as required by the city. The WHP required by the city shall be in addition to any other permits, registrations, or occupational licenses which may be required by federal, state, local agencies having lawful jurisdiction.

6. Vehicle Inspection. Waste haulers shall permit the city to inspect grease haulers registered vehicles.

E. Application Procedure. Once a completed application form has been received, the facility will be inspected prior to the issuance of the permit.

1. During the pre-permit inspection, the information contained in the application form will be verified.

2. The average daily potable water use will be calculated and the permit fee determined.

3. The pretreatment or grease removal device will be inspected.

4. If all information is verified and the device(s) is in proper working condition, a permit will be issued together with a copy of the most current information or documents for “best management practices.”

5. If the pretreatment device, interceptor or trap requires any maintenance or repairs, or incorrect information has been given, the city shall provide a written notice to correct any deficiencies, including a required time schedule for repairs to be effected prior to a second pre-permit inspection. Second pre-permit inspections shall be performed after a minimum of thirty calendar days have elapsed to allow for corrective action by the food service facility to occur. If the facility is not in compliance at the second pre-permit inspection, charges and fees will be levied for future inspections. An application for a permit shall be granted with conditions or denied within sixty days after the date of the last pre-permit inspection in which the applicant’s facility is in compliance.

F. Discharge Permit. The following criteria apply to all permits issued by the city:

1. Each permit shall be effective for no more than a three-year period and shall have an effective and an expiration date.

2. The permit must be displayed in a conspicuous place where it can be seen by the staff of the food service facility and a copy of the permit must be kept in the records file.

3. The permit shall be issued to a specific user for a specific operation. A permit shall not be transferred or sold to a new owner under any circumstances.

4. A new owner is required to apply for a new permit.

G. An application for renewal of the permit shall be submitted at least sixty days prior to the expiration date of the existing permit by each applicant wishing to continue to discharge into the wastewater collection system.

H. Failure to submit applications in a timely manner shall be a violation of this chapter.

I. The terms and conditions of the permit are subject to modification by the city during the term of the permit, if limitations or requirements in this program are modified. The user shall be informed of any proposed changes in the issued permit at least sixty days prior to the effective date of the change(s). Any changes or new conditions in the permit shall include a reasonable schedule for achieving compliance.

J. Entry. Each food service facility shall allow the city and other duly authorized employees or agents of the city bearing proper credentials and identifications access at all reasonable times to all parts of the premises for the purpose of inspection, observation, record examination, measurement, sampling and testing in accordance with the provisions of this chapter.

K. The refusal of any food service facility to allow the city entry to or upon the facilities premises for purposes of inspection, sampling effluents or inspecting and copying records or performing such other duties as shall be required by this division shall constitute a violation of this division. The director may seek a warrant or use such other legal procedures as may be advisable and reasonably necessary to discharge his duties pursuant to this chapter.

L. Inspection. All facilities shall be inspected as follows:

1. Pre-permit Inspections. Pre-permit inspections shall be conducted by the city.

2. Permit Inspections. The city shall inspect facilities on both an unscheduled and unannounced basis or on a scheduled basis after a permit has been issued to compliance with the requirements of this chapter. The city shall also determine if the practices contained in the “Best Management Practices Manual” issued to the facility have been implemented.

3. All facilities with current permit shall be inspected at least once a year.

a. Inspections shall include all equipment, food processing and storage areas and shall include a review of the processes producing wastewater discharged from the facility through the grease interceptor/trap or other pretreatment device; and

b. The city shall also inspect the interceptor/trap or pretreatment device maintenance logbook and file, other pertinent data, the grease interceptor/trap and may check the level of the interceptor/trap contents and/or take samples as necessary. The city shall record all observations in a written report. Any deficiencies shall be noted, including but not be limited to:

i. Failure to properly maintain the pretreatment device in accordance with the provisions of the discharge permit and this chapter,

ii. Failure to report changes in operations, or wastewater constituents and characteristics,

iii. Failure to report pumping activities or keep copies of manifest forms or receipts as required by the permit,

iv. Failure to maintain logs, files, records or access for inspection or monitoring activities, or

v. Failure to obtain or renew the discharge permit in a timely manner.

4. Any other inconsistency with the program which requires correction by the facility concerned. If any deficiencies are recorded by the city during an inspection, the city shall provide the facility a written notice to correct the deficiency within twenty-one calendar days, and a tentative date for a first reinspection.

5. Reinspections. The city shall reinspect facilities which received deficiency notices after the original inspection. The city shall inspect any repairs or other deficiencies and shall provide written notice of compliance or noncompliance as the case may be. In the event the facility has returned to compliance with all of the deficiencies, there shall be no charge for the reinspection. In the event of continuing noncompliance, successive reinspections will be scheduled and appropriate fees shall be charged to the facility concerned for the first and all successive reinspections. A first reinspection shall be performed after a minimum of twenty-one calendar days have elapsed to allow for corrective action by the facility to be completed.

M. Monitoring. The city shall have the right to sample and analyze the wastewater from any facility at any time to determine compliance with the requirements of the city code. If violations of the oil and grease limit are detected, enforcement action may be initiated and demand monitoring costs billed to the facility.

N. Permit Contents. All approved permits shall include a statement of the duration of the permit, including the effective and expiration dates; identification of all approved vehicles and the liquid wastes which may be hauled by each; standard conditions relating to permit renewal and permit revision; a list of definitions; reporting requirements, spill procedures, and any other applicable special conditions. Special conditions may include, but are not limited to:

1. A statement that all pretreatment devices, grease interceptors and traps shall initially be pumped completely empty;

2. For interceptors and traps, excessive solids shall be scraped from the walls and baffles, and inlet, outlet and baffle ports shall be cleared. Reintroduction of gray water only into the interceptor shall be permitted provided the waste hauler has written authorization to return the gray water from the food service facility concerned. The waste hauler shall wait at least twenty minutes to allow the interceptor waste to separate in the truck tank before attempting to reintroduce the gray water to the interceptor. No grease or solids may be reintroduced into the interceptor;

3. A statement indicating no grease or gray water will be accepted at any city-owned facility and the permittee should contract with other private or public facilities to properly dispose of the grease and food solids and other wastes;

4. A statement that the waste hauler is required to comply with all federal, state and local regulations concerning hauling of waste to include the pumping of grease interceptors and the hauling and disposal of their contents;

5. Any other statement or requirement which the city believes to be necessary to meet the intent of this chapter.

O. Permit Renewal. An application for permit renewal shall be submitted on the appropriate renewal form together with the renewal fee at least sixty days prior to the expiration date of the existing permit by each applicant wishing to provide waste hauling services, the use

of approved pretreatment devices and permitted food service facilities located in city of Brentwood wastewater collection service area.

P. Spill Reporting. Any accident, spill, or other discharge of waste, grease or gray water which occurs within the city shall be reported to the city by the waste hauler and/or facility as soon as possible but not longer than twenty-four hours after the incident.

1. The waste hauler and/or the facility shall comply with all procedures contained in federal, state and local regulations.

2. The waste hauler and/or facility shall be responsible for all clean-up procedures and costs.

Q. Recordkeeping. Waste haulers and facilities shall retain and make available for inspection and copying, all records related to waste hauling, grease interceptor pumping and grease disposal from businesses located in the city of Brentwood wastewater collection service area. These records shall remain available for a period of at least three years. The city may require additional recordkeeping and reporting, as necessary, to ensure compliance with the terms of this chapter. (Ord. 808 § 1 (part), 2005)

13.04.185 Determination on permit application.

A. Following review of the application and receipt of such information as the director may require, the director shall determine whether to approve or deny the permit or permit amendment being sought. The director will grant the permit if:

1. The applicant has complied with all applicable requirements of this chapter and applicable city, county, state, and federal regulations, laws, and orders regarding the proposed discharge;

2. The applicant has furnished all information requested by the director;

3. The director determines there are adequate devices, equipment, chemicals, personnel, and other facilities to sample, meter, convey, treat, and dispose of the proposed discharges;

4. The persons to be responsible for treatment and control of the proposed discharges are adequately trained and capable of consistently complying with permit requirements; and

5. The applicant and the property owner have expressly agreed to the conditions applied by the director.

B. In granting such an application, the director will condition the permit in order to ensure compliance with this chapter and applicable city, county, state, and federal regulations,

laws, and orders regarding the proposed discharge, which may include but are not limited to the following:

1. Limits on the average and maximum wastewater constituents and characteristics;
2. Requirements for installation and maintenance of flow monitoring, inspection, and sampling facilities;
3. Specifications and pretreatment requirements for monitoring programs which may include sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule;
4. Compliance schedules;
5. Requirements for submission of technical reports or discharge reports;
6. Requirements for maintaining and retaining records relating to wastewater discharge as specified by the city and affording the city access thereto;
7. Requirements for notification to the city of any new introduction of wastewater constituents or any significant change in the volume or character of the wastewater constituents being introduced into the wastewater stream;
8. Requirements and plans for protection against accidental discharges including, but not limited to, berming of chemicals and waste materials. The review and approval of such plans and operating procedures shall not relieve the user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of this code or other state or federal regulations; and
9. Requirements for notification of accidental discharges. (Ord. 808 § 1 (part), 2005)

13.04.190 Permit denial.

A. Notwithstanding Section 13.04.075 of this chapter, the director shall deny a discharge permit, other permit, or amendment to a permit under this chapter if the director determines one or more of the following exist:

1. The application is not accompanied by required fees and charges;
2. The application contains incomplete, false or misleading information;
3. The issuance of the requested permit would result in the discharge of wastewater or other substances which would endanger the public health or safety or public or private property;

4. The issuance of the requested permit would cause the plant or the sewerage system to violate any applicable permit conditions, laws, regulations, or orders of the city, county, state or federal government;

5. The applicant has not provided sufficient information to establish its discharge will comply all requirements of this chapter and with such other terms and conditions as the director deems necessary to apply to the requested permit; or

6. The applicant has not provided plans for sufficient protection from accidental discharges to the land, storm sewer system or sanitary sewer system.

B. Any permit denial or revocation of a permit pursuant to this chapter may be appealed to the city council of the city of Brentwood. The permit applicant or permittee shall have fifteen calendar days from the date of notification of the permit denial or revocation to submit a written request for a hearing. Failure to file an appeal constitutes acceptance of the decision to approve or deny the permit and any conditions thereof. City council shall conduct a public hearing and decide within sixty calendar days from the receipt of the appeal, whether or not to grant the permit. The decision of the city council shall be final. The city council shall follow the same guidelines as established in the city code with respect to permit issuance, and may impose reasonable conditions on any order granting the permit. In conducting a public hearing, the council may receive new evidence and shall not be bound by the technical rules of evidence. (Ord. 808 § 1 (part), 2005)

13.04.195 Nontransferability.

No permit holder shall assign, transfer or sell any permit issued under this chapter nor use any such permit for or on any premises or for facilities or operations or discharges not expressly encompassed within the underlying permit. No person shall discharge any industrial wastewaters in excess of the quality or quantity limitations set by the terms and conditions of the permit without first obtaining approval of an amendment to the permit pursuant to this chapter. (Ord. 808 § 1 (part), 2005)

13.04.200 Permit amendment.

A. Any permit holder may apply at any time for an amendment to a permit issued under this chapter to amend the terms and conditions of the permit. Such an application will be processed in the same manner as an original application.

B. Each permit issued pursuant to this chapter shall be automatically amended to include any more stringent, applicable federal or state requirements, regulations, laws, or orders for discharges than are contained in the permit or in this chapter. The director will endeavor to give notice of changes in reporting requirements, but permit holder shall be responsible for complying with more stringent limitations with or without notice from the city.

C. In order to protect the health and safety of the community or to comply with an applicable federal, state, or county order, regulation, or law, the director may order an amendment to an existing permit at any time upon reasonable notice. Reasonableness of the

notice will be determined by the urgency of the danger or the terms of the federal or state order, regulation, or law. (Ord. 808 § 1 (part), 2005)

13.04.205 New sources.

A. New sources of industrial waste discharges shall be in full compliance with the provisions of this chapter at the time of commencement of discharge. Dischargers of new sources, upon request of the director, shall complete a waste minimization study in accordance with guidelines published by the director, and shall certify measures have been taken to minimize toxic constituents in the discharge.

B. The owner of every newly constructed, remodeled, or converted commercial or industrial facility shall comply with the following requirements upon commencement of discharge. These requirements shall apply to remodeled or converted facilities to the extent the portion of the facility being remodeled or converted is related to the subject of the requirement.

C. Interior (indoor) floor drains to the sewer system may not be placed in areas where hazardous materials, hazardous wastes, industrial wastes, industrial process water, lubricating fluids, vehicle fluids or vehicle equipment cleaning wastewater are used or stored, unless secondary containment is provided for all such materials and equipment. Interior floor drains shall not be connected to the storm drain. The director may allow an exception to this requirement under the following circumstances:

1. When the drain is connected to a wastewater treatment unit approved by the director;
2. For safety showers, when the drain is installed with a temporary plug which remains closed except when the shower is in use, or when the drain is protected from spills by either a covered sump or berm system. If a sump is used, the capacity shall be at least as large as the largest chemical container in the laboratory; or
3. For industrial process equipment, if the equipment does not contain hazardous waste and if all floor drains are equipped with fail-safe valves which shall be kept closed during periods of operation.

D. Exterior (outdoor) drains may be connected to the sewer only if the area in which the drain is located is covered or protected from rainwater run-on by berms and/or grading, and appropriate wastewater treatment approved by the director is provided. Any loading dock area with a sanitary sewer drain shall be equipped with a fail-safe valve, which shall be kept closed during periods of operation.

E. Exterior drains shall be connected to the storm drain. Such connections shall not be permitted within the following areas:

1. Equipment or vehicle washing areas;

2. Areas where chemicals, hazardous materials, or other uncontained materials are stored unless secondary containment is provided;

3. Equipment or vehicle fueling areas or fluid changing areas;

4. Loading docks where chemicals, hazardous materials, grease, oil, or waste products are handled; or

5. Fueling areas shall have impermeable floors and rain covers which extend a minimum of ten feet in each direction from each pump.

F. Roof drains may discharge to the storm drain system, provided all roof equipment, tanks, and pipes containing other than potable water, cooling system water, or heating system hot water have secondary containment.

G. Boiler drain lines shall be connected to the sewer system and may not be discharged to storm drain system.

H. Condensate lines shall not be connected or allowed to drain to the storm drain system.

I. Copper, copper alloys, lead and lead alloys, including brass, shall not be used in the sewer lines, connectors, or seals coming in contact with sewage, except for sink traps and associated connecting pipes.

J. Secondary containment shall be provided for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. The director may allow a drain for work areas (but not for hazardous storage areas) if the secondary containment area is covered and if the drain is connected to a wastewater treatment facility approved by the director.

K. Sacrificial zinc anodes are not permitted to be in contact with the water supply in a water distribution system.

L. Aspirators connected to laboratory sink faucets are prohibited; however, aspirators designed and used for transferring acids and bases from stationary permanent laboratory sinks to treatment facilities shall be allowed.

M. Laboratory countertops and laboratory sinks shall be separated by a lip which prevents hazardous materials spilled on the countertop from draining to the sink.

N. Sewer traps below laboratory sinks shall be made of glass or other approved transparent materials to allow inspection and to determine frequency of cleaning. Alternatively, a removable plug for cleaning the trap may be provided, in which case a cleaning frequency shall be established by the director. In establishing the cleaning frequency, the director shall consider

the recommendations of the facility. The director will grant an exception to this requirement for areas where mercury will not be used; provided, in the event such an exception is granted and mercury is subsequently used in the area, the sink trap shall be retrofitted to meet this requirement prior to use of the mercury.

O. Swimming pool discharge drains shall not be connected directly to the storm drain system or to the sewer system. When draining is necessary, a hose or other temporary system shall be directed into a sewer (not storm drain system) cleanout. A sewer cleanout shall be installed in a readily accessible area.

P. Food service facilities shall have a sink or other area for cleaning floor mats, containers, and equipment, which is connected to a grease interceptor and the sanitary sewer. The sink or cleaning area shall be large enough to clean the largest mat or piece of equipment to be cleaned. New buildings constructed to house food service facilities shall include a bermed area for a dumpster.

Q. Parking garage floor drains on interior levels shall be connected to an interceptor and to the sanitary sewer system. (Ord. 808 § 1 (part), 2005)

13.04.210 Compliance schedules.

A. In the event an industrial waste discharge permit holder or applicant should be affected by a newly promulgated waste discharge standard or an existing discharge permit holder is reclassified as being subject to the categorical standards provided in the pretreatment regulations due to process changes, or an inspection reveals the presence of regulated processes, or new information becomes available which justifies or requires a reclassification, the discharger shall, within ninety days of the effective date of a categorical standard or reclassification, file a baseline monitoring report (BMR). If additional pretreatment or additional operation at and maintenance procedures or installation of facilities, equipment or improvement, will be required to meet the pretreatment regulations, the discharger shall include a compliance time schedule which specifies the shortest schedule by which the discharger will provide such additional pretreatment procedures or facilities, equipment or improvements to attain compliance for purposes of pretreatment regulations, the completion date in this schedule shall not be later than the established compliance date provided by the applicable pretreatment regulations. (Ord. 808 § 1 (part), 2005)

13.04.215 Revocation, suspension or modification of permit.

A. In addition to any other remedies which may be provided to enforce the provisions of this chapter, any permit issued pursuant to this chapter may be revoked, made subject to additional terms or conditions, modified or suspended by the director in addition to other remedies provided by law, when such action is necessary in order to stop a discharge or a threatened discharge which presents a hazard or a threat of hazard to the public health, safety, welfare, natural environment, sewer system, or which violates this chapter, or which action is intended to implement programs or policies required or requested of the city by appropriate state or federal regulatory agencies.

B. Any discharger notified of the city's intent to revoke, make subject to additional terms or conditions, modify, or suspend the discharger's permit shall immediately comply with directives of the director or cease and desist the discharge of all industrial wastes or such portion of wastes as will eliminate the wrongful discharge to the sewer system pending any hearing the discharger may request as set forth in this chapter.

C. The director shall reissue or reinstate any industrial wastes permit or modified permit upon proof of satisfactory ability to comply and/or compliance with all discharge requirements, and the payment of any costs, fines, or penalties which may be assessed. The director may require any permit holder to develop and implement a compliance schedule for any proposed modification to permit terms and conditions.

D. The city will have the authority to comply with the public participation requirements of 40 CFR Part 25 in the enforcement of national pretreatment standards by annually providing public notification in local newspapers. This notification may consist of a list of industrial users, which during the previous twelve months, were in significant noncompliance of applicable pretreatment standards or other pretreatment requirements. (Ord. 808 § 1 (part), 2005)

13.04.220 Appeal of decision of director.

A. Any person dissatisfied with the decision of the director to issue, deny, condition, amend, suspend, revoke, or modify any permit pursuant to this chapter may file a written appeal with the city manager. Such an appeal shall only be effective if the appeal is filed in writing together with any applicable fees with the city manager no more than ten working days following the date of the decision by the director.

B. The director shall give the industrial waste discharger applicant or permit holder ten working days' written notice of intent to issue or deny the application or to revoke, make subject to additional terms or conditions, modify or suspend the discharger's permit. The director shall post a copy of such notice at City Hall for interested persons. The notice shall set forth specifically the grounds for the director's intention to deny, revoke, or suspend and shall inform the applicant or permit holder or members of the public they have ten days from the date of receipt of the notice to file a written request for a hearing. The application shall be issued or denied or the permit shall be revoked, modified or suspended if a hearing request is not received within the ten-working day period.

C. If the applicant or permit holder or interested party or parties file(s) a timely hearing request, the city manager, or manager's designee, shall within ten working days from the receipt of the request, set a time and place for the hearing. All parties involved shall have the right to offer testimonial, documentary, and tangible evidence bearing on the issues and to be represented by counsel. The decision of the city manager, or the manager's designee, whether to issue or deny the application or revoke, make subject to additional terms and conditions, modify or suspend the permit shall be final. (Ord. 808 § 1 (part), 2005)

13.04.225 Public access and confidentiality of information.

A. It is the intent of this chapter that the procedures and enforcement conducted pursuant to this chapter be conducted openly and publicly whenever possible. Pursuant to state law, the information filed and submitted by applicants, permit holders, and other interested persons shall be public record and open for public review.

B. However, when permitted by state law, information submitted to the city pursuant to this chapter may be claimed as confidential by the applicant or permit holder. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or, in the case of other submissions, by stamping the words “confidential business information” on each page containing such information. Information submitted prior to the inclusion of this section in the chapter may be withdrawn and replaced by submittals stamped “confidential business information.” If no such claim is made at the time of submission, the information may be made available to the public without further notice. Upon receipt of a request for the release of information to the public which includes information which the applicant or permit holder has notified the city is claimed to be a trade secret as provided herein, the city shall notify the discharger in writing of the request by certified mail, return receipt requested. The city shall release the information to the public, but not earlier than thirty days after the date of mailing the notice of the request for information, unless, prior to the expiration of the thirty-day period, the applicant or permit holder files an action in an appropriate court for a declaratory judgment that the information is subject to protection under the laws of the state of California or for an injunction prohibiting disclosure of the information to the public and immediately notifies the city of that action. This section does not permit any person to refuse to disclose the information required pursuant to this chapter to the city.

C. Information and data provided to the city pursuant to this section which constitutes a description of wastewater constituents and characteristics, effluent or flow data, and effluent concentrations shall be available to the public without restriction. A discharger may be prohibited from discharging a substance unless its composition is made known to the city.

D. Notwithstanding subsection C of this section, the information shall be made available upon written request to other governmental agencies for uses related to this chapter, the NPDES permitting system, or other similar pollution regulatory programs. (Ord. 808 § 1 (part), 2005)

13.04.230 Reporting requirements.

A. All permit holders shall submit periodic reports to the director. Specific reporting requirements will be specified in the underlying permit or in controlling directives or violation notices. Minimum reports required will be:

1. Baseline monitoring reports (BMR);
2. Compliance reports, which will be submitted within ninety days of the compliance date calculated pursuant to the applicable pretreatment standards or local standards;

3. Periodic discharge reports, which may include but not be limited to, nature of process, volume, rate of flow, mass emission rate, production quantities, hours of operations, number and classification of employees, or other information relating to the generation of waste including wastewater discharge. These reports will indicate whether applicable pretreatment standards and discharge limits are being met during the reporting period. These reports may also include the chemical constituents and quantity of liquid or gaseous materials stored on-site, even though they are not normally discharged;

4. A zero discharge report may be required to certify a discharger does not discharge industrial waste to the sanitary sewer system.

B. In order to be complete, any report filed pursuant to this section shall contain a certification statement reading as follows:

“I certify under penalty of perjury this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete.”

C. This certification statement shall be signed by the responsible corporate officer, manager, general partner, or duly authorized representative of the discharger and makes that person legally accountable for the information submitted.

D. It is a violation of the underlying permit to fail to timely file or refuse to file a report required pursuant to this section. (Ord. 808 § 1 (part), 2005)

13.04.235 Water conservation.

The director may require a discharger to evaluate water conservation measures for industrial process water as a part of any pre-construction audit, industrial wastewater discharge permit application, mass audit study (MAS), reasonable control measures plan (RCMP), best management practices (BMP) or at any other time deemed necessary by the director. The director may require implementation of water conservation measures which are found to be cost-effective. (Ord. 808 § 1 (part), 2005)

13.04.240 Monitoring.

A. All monitored discharges shall be analyzed and tested according to procedures outlined in 40 CFR Part 136.

B. Each discharger shall provide at its own expense monitoring facilities to allow inspection, sampling, and flow measurements of the building sewer and internal drainage systems. The monitoring facility should normally be located on the discharger's premises, but the city may, when such a location would be impractical or cause undue hardship on the discharger, allow the facility to be located in the public street or sidewalk area, so long as an

encroachment permit is first obtained and it will not pose any hazard or inconvenience to vehicle or pedestrian traffic.

C. A monitoring facility shall allow ample room to allow accurate sampling and preparation of samples for analysis and shall be located so it is not obstructed by landscaping or parked vehicles. The facility, sampling, and measuring equipment shall be maintained in a safe and proper operating condition at all times at the expense of the discharger. (Ord. 808 § 1 (part), 2005)

13.04.245 Self-monitoring.

A. As a permit condition, the director may require the discharger to conduct a sampling and analysis program of discharger's industrial waste of a frequency and type required by the director to demonstrate compliance with the requirements of this chapter. The discharge permit shall specify the minimum frequency and type of samples, flow monitoring, measuring, and analyses to be conducted by the discharger. The permit may also specify the type of sampling equipment and flow monitoring equipment which must be installed and used. The required self-monitoring program will depend on factors such as flow, potential for the discharge to cause interference, pass-through, or upset of treatment processes, pollutants present, and prior compliance history (if any) of the discharger. Additional monitoring may be required by the director for violation follow-up, assisting the city in evaluating effects of the discharge, or as part of a compliance directive or notice of violation.

B. The director may require self-monitoring for facilities for which a permit has not been issued. In addition, the director may require investigations or studies to determine methods of reducing toxic constituents in the discharge. The director may also request information be submitted within a reasonable time concerning the chemical or biological constituents of any substance or chemical product which could potentially be discharged to the sewer system or the storm drain system or which the director determines may, alone or in accumulation with other discharges, contribute to a violation by the plant of any applicable water quality standards or of any of its NPDES permits or contribute to an upset of plant processes. (Ord. 808 § 1 (part), 2005)

13.04.250 Inspection and sampling.

A. The director, or any authorized representative of the director, county health officer, or state or federal government agency related to pollution regulation, may conduct all inspection, surveillance, sampling, photographing, measuring, observing, and monitoring procedures necessary to assure compliance with applicable sections of this chapter, any applicable permit

issued pursuant to this chapter, and applicable county, state, and federal orders, regulations and laws.

B. The director and these authorized representatives shall be authorized, and the owner and occupants of any premises where wastewater is discharged or created shall allow these representatives to enter without unreasonable delay during all hours of discharge and hours of operation of the premises to conduct these procedures.

C. The director and these authorized representatives shall have the right, and the owner and occupants of any premises where wastewater is discharged or created shall allow these representatives to set up on the premises any devices necessary to conducting sampling, inspection, compliance monitoring, or metering operations.

D. The director and these authorized representatives shall have the right to inspect and copy any and all records related to the quantity and quality of wastewater discharges, building systems, and chemical and hazardous material usage, as well as those records supporting any reports submitted by the discharger or required by the underlying discharge permit. These records shall be made available by the discharger at either the premises themselves, the department of public works, or another location within the city designated in writing by the dischargers.

E. Any unreasonable refusal to provide access and records as required by this section shall be grounds to terminate all sewer service or revoke the underlying permit, or both. (Ord. 808 § 1 (part), 2005)

13.04.255 Charges and fees.

A. All fees and charges imposed by this title shall ultimately be the responsibility of the owner of the real property subject to the imposition of these fees and charges. However, payments of sewer service charges or sewer discharge permit fees may be made by a customer, a tenant or tenants, or any agent on behalf of the owner.

B. Nothing in this chapter is intended to permit recovery of charges for sewer services to or for a tenant's residential use from any subsequent tenant or the property owner in contravention of the provisions of the California Public Utilities Code.

C. The city council may adopt charges and fees to implement this chapter. Those fees and charges may include civil penalties.

D. Sewer Service Charge. For the purpose of providing funds.

1. For the payment and/or before maturity of the principal of and interest on all sewer revenue bonds heretofore or hereafter issued by the city for the purpose of acquisition, construction, improvement and financing of improvements to the sewer system, provided such payment is not otherwise provided for in accordance with the direction of the city council;

2. For payment of the cost of improvements to and replacement of the sewer system; and

3. For payment of the cost of maintenance and operation of the sewer system, there shall be levied, assessed or charged upon all premises connected with the sewer system or required by this chapter to be connected to the sewer system monthly sewer service charges set forth pursuant hereto for the facilities and services furnished or available to such premises by the

sewer system and all such charges shall be enacted and set by resolution of the council pursuant hereto.

E. No facilities or services of the sewer system shall be furnished to any premises or to any owner or any other person free of charge.

F. The charges provided for sewer service and connection charges to nonresidential uses shall be obtained by multiplying in the applicable charge for a single-family dwelling unit by a figure representing a ratio of the quantity and quality of the sewage estimated to be discharged monthly into the sewer system by such nonresidential uses and discharged from a single-family dwelling unit; such ratio to be determined and computed by the director of public works.

G. Separate premises under single control or management shall be furnished the facilities and services of the sewer system through separate individual service connections unless the city elects otherwise. Separate houses or buildings on the same lot, or on adjoining lots, under a single control or management, shall be furnished such facilities and services by either of the following methods:

1. Through separate service connections to each such house or building; or
2. Through a single service connection to supply all such houses and buildings in which case one connection charge and one service charge shall be applied to each house or building and the responsibility for payment of charges for all facilities and service furnished shall be assumed by the owner having such control or management.

H. Connection Charges (Public Facilities Fees). The council finds and determines all premises within the city limits on the effective date of the ordinance codified in this chapter, upon which habitable improvements were existing on that date, have been and are subject to payment of city taxes heretofore levied and/or hereafter to be levied by the council for the purpose of paying the principal of and interest on general obligation bonds of the city issued for acquisition, construction and completion of portions of the sewer system heretofore constructed; and the purpose of connection charges provided in this subsection C of this section is to require all premises connected to the sewer system after the effective date of the ordinance codified in this chapter, or hereafter connected or required to be connected to this sewer system, to pay for the respective benefits to them from the system which the premises are to receive the use of and to provide for expansion of the system as required for new connections. Connection charges (public facilities fees) shall be determined and charged in accordance with the Brentwood Municipal Code.

I. The applicable charge provided for by this subsection, shall be paid at/or prior to the issuance of any building permit except in any case where connection is to be made to an extension of the sewer system constructed in assessment district proceedings, and in each such case the applicable charge may be paid from the proceeds realized from such assessment district proceedings as soon as such proceeding become available for that purpose.

J. Any premises which were in the city limits on or before November 1, 1977, on which habitable improvements existed on that date, shall be exempt from all charges provided for in this subsection C of this section, as long as the character and use of the premises is not so changed as to increase the amount of sewage or change the character thereof so as to increase the burden on the system; if any such change occurs, or if application is made for building new or altering structures thereon, or if a different use or uses of existing structures thereon is proposed, such premises shall be liable for all charges provided to be made as provided in this chapter.

K. The city of Brentwood does establish an annual sewer service standby charge as established by city council resolution.

1. The charge shall be billed on a fiscal year basis beginning with the fiscal year of July 1, 1988 through June 30, 1989, and the charge shall be collected as a part of the annual general county tax bill.

L. Fees and Billing. The fees provided for in this chapter are separate and distinct from all other fees chargeable by the city. All fees shall become due on the twenty-fifth day following the billing date and if not paid by the due date a five percent delinquent fee penalty will be added to the following bill. Fees applicable to this chapter are as follows:

1. All sewer service charges shall be prescribed by resolution of the city council.

2. Opening bills, closing bills, bills rendered for periods less than the billing period, and other bills requiring prorating will be computed in accordance with the applicable schedule, but the amount of any fixed charge or minimum charge specified therein will be prorated on the basis of the number of days in the period.

M. The city shall have the right to require any person liable to pay any sewer service charge to make a reasonable deposit, as set forth by resolution, to insure collection of the charges herein fixed.

N. All sewer charges shall be billed to the owner or occupant of the premises served, or to the owner of any premises, as determined by the city, on the date on which such premises are required by this chapter to connect to the sewer system. (Ord. 808 § 1 (part), 2005)

13.04.260 Notices.

A. Notices from the city to any person will be given in writing, either delivered to the person or mailed to his last known address, except where conditions warrant or in any emergency the city may give verbal notice by telephone or in person.

B. Notices from any person to the city may be given by such person or his authorized representative verbally or in writing, in person or by mail, to the office of the city clerk or director of finance. (Ord. 808 § 1 (part), 2005)

13.04.265 Protection from accidental discharges.

A. Each industrial user shall provide protection from accidental discharge of prohibited materials or other wastes regulated by this chapter into either the storm sewer or sanitary sewer systems.

B. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the industrial user's expense.

C. Any direct or indirect connection or entry point for deleterious wastes to the discharger's plumbing or drainage system shall be eliminated through reasonable disconnection or barriers as necessary to ensure protection to the system. (Ord. 808 § 1 (part), 2005)

13.04.270 Reporting accidental discharges.

Dischargers shall notify the city immediately upon accidentally discharging wastes in violation of this chapter or the discharger's permit in order to enable countermeasures to be taken by the city and other government agencies to minimize damage to the community sewer, plant, treatment processes, and waters of the city and the state. The discharger shall file a detailed written statement with the city within fifteen days of the accidental discharge which describes the causes of the discharge and the measures being taken to prevent any further occurrence. Compliance with this section will not relieve the discharger of liability for any expense, loss, or damage to the sewer system, plant, or treatment process, or for any fines imposed on the city on account thereof under the Water Code or Fish and Game Code. (Ord. 808 § 1 (part), 2005)

13.04.275 Employee training and notice.

A. All permit holders shall inform appropriate employees of the provisions of this chapter by conducting orientation of new employees involved in permit-related activities and annual training.

B. All permit holders shall provide areas for posting of information regarding pollution control, and in all cases, shall post signs or notices indicating approved methods for disposition of wastes and reporting requirements for accidental discharges and increased loadings with telephone numbers for appropriate response agencies. (Ord. 808 § 1 (part), 2005)

13.04.280 Disposal of unacceptable waste.

Waste not permitted to be discharged into the community sewer shall be transported to a state-approved disposal site. The required waste haulers report shall be completed and a copy furnished within thirty days to the city by the discharger. (Ord. 808 § 1 (part), 2005)

13.04.285 Illegal sewer uses.

Any use of any sanitary sewer system which does not conform to the regulations established in this chapter is illegal. Within thirty days following notice by the director of public works or an illegal use exists, corrective measures to eliminate the illegal use shall be made by

the owner or responsible party except in cases where extensive or exceptional repairs or replacements to existing installations are required, the city may grant extensions of time or consent to temporary remedial arrangements. (Ord. 808 § 1 (part), 2005)

13.04.290 Agreements in exceptional cases.

A. Discharge of wastes not meeting the requirements stated in this title may be permitted by special agreement between the discharger and the city, so long as the agreement conforms to state and federal limitations.

B. The city shall have the right to disallow exceptional discharges, prescribe pretreatment of some types of industrial wastes and to establish surcharges based on the cost of handling exceptional wastes in the city's sewage collection and treatment system. (Ord. 808 § 1 (part), 2005)

13.04.295 Violations and civil penalties.

A. Violations. Any person who is found to have violated any provision of this chapter or any condition of a permit issued pursuant to this chapter, shall be, upon conviction, subject to a penalty in an amount not to exceed five hundred dollars or by imprisonment for not more than six months, or by both, for each offense as provided for in city ordinances. Each separate violation shall constitute a separate offense, and upon conviction of a specified ordinance violation, each day of violation shall constitute a separate violation. In addition to the penalties provided in this section, the city may recover reasonable attorney's fees, court costs, court reporter's fees and other expenses of litigation by appropriate suit at law against the person found to have violated this chapter or the orders, rules, regulations and permits issued hereunder.

B. Pursuant to Government Code, the city may impose civil penalties on persons who violate the provisions of this chapter in addition to any other remedies which the city or any other government agency may have. Civil penalties of up to ten thousand dollars per day for each violation may be imposed.

1. The process by which such civil penalties are determined and reviewed will be the same as and a part of the process by which a violation of the sanitary sewer use rules and regulations is determined and reviewed as adopted by the council by resolution.

2. If such a process is not applicable, any person may appeal the imposition of a civil penalty under this chapter by filing a notice of appeal with the city manager within fifteen days of the notice of imposition of a civil penalty. The city manager will fix a time and place for hearing the appeal and give notice in writing to the appellant of the time and place of hearing by serving it personally or by depositing it in the United States mail, postage prepaid, addressed to such person at the address appearing on the notice of appeal. At the hearing on the appeal, the city manager shall receive testimony from the appellant and the city officers or employees recommending the penalties. The decision of the city manager shall be in writing, shall be served on the appellant in the same manner as prescribed for the notice of hearing, and shall be a final administrative decision.

3. Any civil penalties imposed under this chapter may be collected in the same manner as other sanitary sewer charges and fees. The imposition of civil penalties shall not preclude in any way the imposition of additional requirements, charges, damages, or criminal sanctions which may be required or imposed by the city or any other person.

4. Any person contesting a decision on a civil penalty shall be bound by the requirements of Government Code.

5. The city may petition the superior court to impose, assess and recover these civil penalty sums. In determining whether to enforce the civil penalties, the court will take into consideration all relevant circumstances including, but not limited to, the extent of harm caused by the violation, the nature and persistence of the violation, the length of time over which the violations occurred, and corrective action, if any, taken. (Ord. 808 § 1 (part), 2005)

13.04.300 Show cause hearing.

A. The director may order any user who causes or allows an unauthorized discharge to enter the sanitary sewer system to show cause before the city manager or the city council why a proposed enforcement action should not be taken. A notice will be served on the user specifying the time and place of the hearing and the proposed enforcement action and reasons therefor. The notice will be served personally or by registered or certified mail at least ten working days before the scheduled hearing.

B. After reviewing the evidence and testimony presented at the hearing, the city manager or the city council, as applicable, may make such orders as the manager or council deems appropriate with due regard to the violations, if any. (Ord. 808 § 1 (part), 2005)

13.04.305 Abatement.

A. In addition to any other remedies provided by law, the director shall have the power to disconnect the user sewer system from the sewerage works. Upon disconnection, the city will estimate the cost of the reconnection to the system, and this user shall deposit the cost of disconnection and estimate reconnection before the user is reconnected to the system. The city will refund any part of the deposit remaining after payment of all costs of disconnection and reconnection.

B. During the period of disconnection, any habitation or occupancy of the premises shall constitute a public nuisance. (Ord. 808 § 1 (part), 2005)

13.04.310 Correction of violation and emergency action.

A. In order to enforce the provisions of this chapter, the city may correct any violation. The cost of such correction, including installation of additional pretreatment facilities shall be added to any sewer service charges and fees on the premises and collected in the same manner as other sewer service charges and fees.

B. In case of emergency, the city may take such steps and obtain such warrants as necessary to enter and correct any illegal discharge or permit violation which poses an imminent threat to public health or safety.

C. Any sewer or sewerage maintenance expenses attributable to a violation of this chapter or a permit issued under this chapter, including excessive preventative maintenance or cleaning, will be charged to the offending discharger by the city. Any refusal to pay such maintenance expenses duly authorized by the city shall constitute a violation of this code. (Ord. 808 § 1 (part), 2005)

13.04.315 Injunction.

In addition to any other remedy provided in this code or by law, the city may petition the superior court or the federal district court for the issuance of a temporary restraining order, preliminary injunction, or permanent injunction, as may be appropriate, restraining any person from a violation of this chapter. (Ord. 808 § 1 (part), 2005)

13.04.320 Falsifying information or tampering with processes.

A. It is unlawful to:

1. Knowingly or recklessly make any false statement, representation, record, report, plan, or other document filed with the city in connection with this chapter;
2. Falsify, tamper with, or knowingly or recklessly render inaccurate, any monitoring device or method or access point; or
3. Divert flow from any monitoring device or equipment installed or operated pursuant to this chapter or any permit issued under this chapter.

B. In addition to any other remedy provided in this code or by law, any such illegal activity will be grounds for revocation of the underlying permit. (Ord. 808 § 1 (part), 2005)

13.04.325 Compliance with federal pretreatment regulations.

Notwithstanding any provision in this chapter, no industrial user shall discharge, cause, allow or permit any discharge into the sanitary sewer system in violation of any federal or state regulation regulating discharges by such users including, but not limited to, the federal pretreatment regulations found in Title 40 of the CFR. Any pretreatment facilities required by those regulations or this chapter shall be provided, operated and maintained at the user's expense. (Ord. 808 § 1 (part), 2005)

13.04.330 Improper sewer connections.

All sewer laterals or sewer cleanouts which contain leaks or breaks, uncapped sewer cleanouts, sump pumps, downspouts or yard drains which discharge into the sewer system, and all other sources of accidental, negligent or intended introduction of storm runoff or similar

waters into the sanitary system are declared to be a public nuisance, and shall be abated by the owner of the property, who is required to remove or correct such improper sewer connections. (Ord. 808 § 1 (part), 2005)

13.04.335 Resolution declaring nuisance—Notice of abatement.

Whenever any such improper sewer connection exists upon any private property or in any street or alley within the city, the city council shall pass a resolution declaring the same to be a public nuisance, and order the director of public works to give notice of the passage of such resolution as herein provided and stating therein unless such nuisance is abated without delay, the work of doing so will be done by the city and the expense thereof assessed upon the property from which the nuisance is removed. Such resolution shall fix the time and place for hearing any objections to the proposed correction or removal. (Ord. 808 § 1 (part), 2005)

13.04.340 Form of notice—Mailing.

Such notice shall be substantially as follows:

NOTICE TO CORRECT OR REMOVE IMPROPER SEWER CONNECTION

NOTICE IS HEREBY GIVEN on the ____ day of _____, 20____, pursuant to the provisions of the Ordinance Code, City of Brentwood, the City Council of said City passed a resolution declaring all improper sewer connections upon any private property in any public street or alley, constitute a public nuisance and must be abated by correction or removal thereof.

The improper connection on your property is _____.

NOTICE IS FURTHER GIVEN that property owners shall within thirty (30) days hereof correct or remove all such improper sewer connections from their property, or such improper sewer connections will be removed or corrected by the City, in which case the cost of correction or removal will be assessed upon the land upon which such improper sewer connections have been corrected or removed; and such cost will constitute a lien upon such land until paid, and will be collected upon the next tax roll upon which general municipal taxes are collected.

All property owners having any objection to the proposed correction or removal of such improper sewer connections are hereby notified to attend a meeting of the Council of said City, to be held at the Council chambers in the City Hall in said City on _____, 20____, at seven o'clock, p.m., when and where objections will be heard and given due consideration.

DATED _____, 20____

Director of Public Works, City of Brentwood

Such notice shall be mailed to the owner of each property, as such ownership is shown on the last equalized assessment roll, on which the nuisance exists, at least ten days prior to the time fixed by the council for hearing objections. (Ord. 808 § 1 (part), 2005)

13.04.345 Hearing—Action by council.

A. At the time stated in the notice, the city council shall hear and consider any and all objections to the proposed corrections of improper sewer connections and may continue the hearing from time to time.

B. Upon the conclusion of such hearing, the council by motion shall allow or overrule any or all objections, if any, after which the council shall thereupon be deemed to have acquired jurisdiction to proceed and perform the work of correction of the improper sewer connection. The action of the council at the conclusion of such hearing shall be final and conclusive. (Ord. 808 § 1 (part), 2005)

13.04.350 Order to abate nuisance—Abatement by property owner.

A. After final action shall have been taken by the council on the disposition of all objections or in case no objections shall have been received, the city council shall, by resolution, order the city engineer to abate or cause to be abated such nuisance by having the improper sewer connection corrected or removed, and the city engineer and his assistants, employees, contracting agents or other representatives are authorized to enter upon private property for that purpose.

B. As an alternate remedy, the city may take such legal action as may be necessary to require correction or removal of the improper sewer connection by the property owner.

C. Any property owner shall have the right to correct or remove such improper sewer connections himself or have the same corrected at his own expense; provided such correction or removal shall have been completed prior to the arrival of the city engineer or his representatives to perform such work. (Ord. 808 § 1 (part), 2005)

13.04.355 Account and report of cost.

The city public works shall keep an account of the cost of abating such nuisance upon each separate lot or parcel of land, and include such account in a report and assessment list to the city council, which shall be filed with the clerk. Such report shall refer to each separate lot or parcel of land by description sufficient to identify such lot or parcel, together with the expense proposed to be assessed against each separate lot or parcel of land therefor, respectively. (Ord. 808 § 1 (part), 2005)

13.04.360 Notice of hearing on report and assessment list.

A. The city clerk/director of administrative services shall post a copy of such report and assessment list at or near the city clerk's office and shall notify property owners they may appear and object to any matter contained therein. The notice shall be mailed at

least ten days before the time such report will be considered by the city council. Such notice shall be substantially in the following form:

NOTICE OF HEARING ON REPORT AND ASSESSMENT

FOR IMPROPER SEWER CONNECTIONS

NOTICE IS HEREBY GIVEN on the ____ day of _____, 20____, the City Engineer of the City of Brentwood filed with the City Clerk of said City a report and assessment list on the abatement of improper sewer connections within said City, a copy of which is posted near the office of the City Clerk.

The assessment against your property is _____.

NOTICE IS FURTHER GIVEN on the ____ day of _____, 20____, at the hour of seven o'clock, p.m. in the Council Chambers in the City Hall of said City, said report and assessment list will be presented to the City Council of said City for consideration and confirmation, and all persons interested, or to any matter or thing contained therein, may appear at said time and place to be heard.

Dated: _____, 20

City Clerk

City of Brentwood

(Ord. 808 § 1 (part), 2005)

13.04.365 Hearing and confirmation of assessments—Lien against property.

A. At the time and place fixed for receiving and considering such report, the city council shall hear the same together with any objections which may be filed by any of the property owners liable to be assessed for the work of abating the nuisance mentioned in this chapter, and the city engineer shall attend such meeting with his record thereof, and at such hearing, the city council may make such modifications in the proposed assessment therefor it may deem just and proper, after which such report and assessment list shall be confirmed by resolution.

B. The amount of the cost of abating the nuisance upon the property referred to in the report of the director of public works and as finally concluded by resolution of the city council shall constitute a special assessment against each respective lot or parcel of land, and

after thus made and confirmed, shall constitute a lien on such property for the amount of such assessments, until paid. (Ord. 808 § 1 (part), 2005)

13.04.370 Collection on tax roll.

The city clerk shall transmit a copy of the resolution to the Contra Costa County tax collector. Thereafter, such amounts shall be collected at the time and in the same manner, as general city taxes are collected, and shall be subject to the same interest and penalties, and the same procedure and sale in case of delinquency. All laws and ordinances applicable to the levy, collection and enforcement of city taxes are made applicable to such special assessments. (Ord. 808 § 1 (part), 2005)

13.04.375 Payment of assessments, annual installments, interest.

The payment of any assessments of four hundred dollars or more upon single-family residence may be made in annual installments, not to exceed five; the payment of assessments so deferred shall bear interest on the unpaid balance at the rate of seven percent per annum. Such interest shall begin to run on the thirty-first day after the confirmation of the assessments. (Ord. 808 § 1 (part), 2005)

13.04.380 Inspection and correction upon sale.

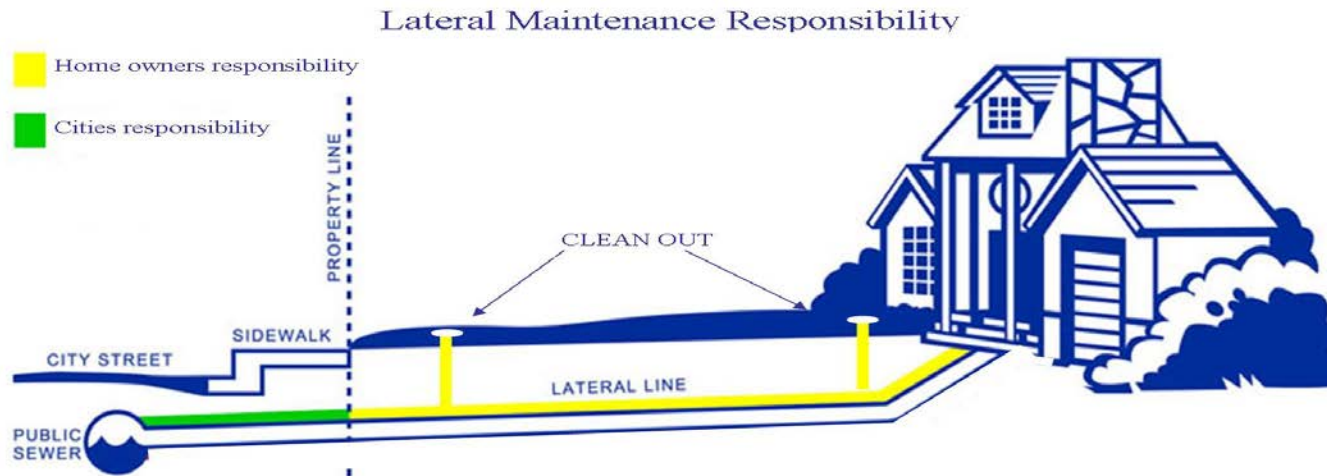
A. Whenever any property is to be transferred to or vested in any other person or entity and property includes any buildings or structures constructed more than twenty-five years prior to the date of transfer or vesting, the sewer lateral(s) to that property shall be tested for infiltration and all necessary repairs or replacements performed to prevent all infiltration. The city engineer shall establish or approve testing procedures. All repair or replacement work shall be completed and approved by the city prior to transfer of title.

1. Exceptions. This section shall not apply:
 - a. To condominium or cooperative apartment buildings or the units within those buildings, except as a condition to conversion to a condominium or cooperative apartment building;
 - b. For ten years after acceptance of a test pursuant to this section, if partial or no repairs of the lateral were required and any repairs were completed pursuant to permit and inspection by the city;
 - c. For ten years after inspection and approval by the city of completed alterations to the lateral, if alterations pursuant to a city permit were made to the location of or connections to the lateral following a test pursuant to this section;
 - d. For twenty-five years after acceptance of work, if replacement of the complete sewer lateral was performed; or

e. If the city engineer determines testing is unnecessary because the piping has less than three joints and the total length does not exceed ten feet.

B. For purposes of this chapter, a sewer lateral shall be deemed to be the piping and sewer appurtenances outside a structure or traveling between two or more structures and terminating at a cleanout, wye, or manhole acceptable to the city engineer. Any modification to the sewer lateral shall be performed and inspected under the requirements of city standards and specifications. (Ord. 808 § 1 (part), 2005)

Lateral Maintenance Responsibilities



APPENDIX E

Spare Parts Inventory List

Size	Pump Parts	Bower Lock	In Stock
6"	Z Pipes	✓	2
6"	90 degree	✓	2
6"	Screens	✓	3
6"	Straight Pipe	✓	3
6"	Green Flex Pipe 1 needs male end	✓	3
6"	Black Flex Pipe	✓	1
6"	Black Flat Hose	✓	3

Size	Pump Parts	Bower Lock	In Stock
6"	Orange Flex Pipe	✓	2
6"	Yellow Flat Hose	✓	6
*Need 2 - 4" Screens w/ Bower Lock			

Size	Pump Parts	Cam Lock	In Stock
6"	Green Flex Pipe	✓	3
6"	Green Flat Hose	✓	3
6"	Yellow Flat Hose	✓	1
6"	Black Flat Hose	✓	3
* Need Gaskets - 10			

Size	Pump Parts	Black Lock	In Stock
8"	Black Flex Pipe	✓	10

PVC Fittings	4" with Gasket
22° Bell and Spiket	12
45° Bell and Bell	1
22° Bell and Bell	3
4" Y's	2

ABS Fittings	4" Slip
Cleanout	1
22°	10

ABS Fittings	3" Slip
4"-3" Reducer	1
T	
45°	

Rubber Colder Couplers	
4" Clay to Plastic	7
4" Plastic to Plastic	6
6" Clay to Plastic	2

PVC Fitting	6" with Gasket
45° Bell and Spiket	1
8" to 6" Reducer	1
12" to 4" Sadel	2
8" Y	1
12" Cuplers	4
8" Cuplers	4
4" SDR PVC Pipe 20 ft.	2

Plugs	Pipe Size
Flow Through Plug	15"
1	18"-24"
1	10"-16"
2	6"-10"

Misc Parts & Equipment	#
Generator	1
Power Snake 100ft	1
20 ft poles	2
3/4 x 20ft leader hose	2
1" x 20ft leader hose	4
3" Tiger Tail	2
4" Tiger Tail	5
Flat hose 4" x 50ft	6
Flex Suction Hoses 4" x 20ft	2
3" x 4" reducer	1
6" Hard Pipe	9
8" O rings for vac tubs	20
2.5" x 20ft Filler Hose - Flat	1
6" x 20ft Drain Hose - Flat	1
Spill kits	1
Multiple High Pressure Cleaning Heads	10
Air Pump	1

Trucks & Pumps	Vehicle #
AquaTech w/ 35ft 8" vac tubes	5916
Vac-Con w/ 24ft 8" vac tubes	5931
Ford F150	5929
Ford F450 CCTV Pearpoint	5924
Godwin 4" pump trailer mounted	5934
Godwin 3" pump trailer mounted	5933
Streets Depart. 6" pump	5128

Traffic Control	# of Items
Cones	100
Signs	14
Sign Board	2

SSMP PREVENTIVE MAINTENANCE SCHEDULE FOR **CCTV**



DATE	GRID #	NEIGHBORHOOD STREET NAME	START MH ID #	FINISH MH ID #	LENGTH OF PIPE CCTV	PROBLEMS IN LINE Y/N	SECTION OF PIPE NEEDS CLEANING Y/N	DETAILS

SSMP HOT SPOT MAINTENANCE SCHEDULE



DATE	QUAD #	NEIGHBORHOOD STREET NAME	START MH ID #	FINISH MH ID #	LENGTH OF PIPE CLEANED	PROBLEMS IN LINE Y/N	AMOUNT OF DEBRIS IN EACH LOAD	DETAILS

APPENDIX F

SECTION 71

SEWERS

This section supersedes in its entirety the like numbered section of the Standard Specification:

71-1.01 Description: This work shall consist of laying sewer pipe and constructing sewer structures as shown on the plans, in accordance with these Specifications, the Special Provisions and as directed by the City Engineer.

The type of sewer pipe and sewer structures will be designated in the improvement plans.

71-1.01A Right of Way: All publicly owned and maintained sanitary sewers shall meet the more restrictive of the following criteria:

1. Minimum width of any easement shall be 15 feet for one (1) utility, with greater widths required for multiple utilities.
2. All easements shall have a minimum width in feet to the required trench width according to the standard detail for trench backfill, plus two (2) additional of width for every foot of depth of the pipe as measured from the bottom of the pipe to finished grade. All pipes shall be centered within their easements.

71-1.02 Materials: Pipe, fittings, miscellaneous materials and the most common joint materials are described in this Section.

Portland cement used in the production of concrete products set forth in this Section 71-1.02 shall be Type II Modified cement conforming to the provisions in Section 90 of the Standard Specifications, "Portland Cement Concrete."

71-1.02A Reinforced Concrete Sewer Pipe: Reinforced concrete pipe shall conform to ASTM Designation: C-76 for the size and classes indicated on the plans.

71-1.02A(1) Plastic Lining: The full three hundred and sixty degrees (360°) of the interior circumference of all reinforced concrete pipes shall be sealed and protected with a polyvinyl chloride resin lining. Copolymer resins will not be permitted.

The plastic liner shall be impermeable to sewage gases and liquids and shall be nonconductive to bacterial or fungus growth. The lining shall be impact resistant, flexible, and shall have an elongation sufficient to bridge up to 1/8" settling cracks, which may take place in the pipe or in the joint after installation without damage to the lining.

The lining shall be of a type which is permanently and physically embedded into the concrete pipe wall by a T-lock type mechanism and shall not rely on an adhesive bond between the lining and pipe wall.

The lining at all pipe joints, and at all joints between individual sheets or sections of lines shall be continuously heat welded by the use of welding strips of the same kind and equivalent thickness of the material as the lines.

The Contractor shall submit for the City Engineer's consideration written information as to the type, size, workmanship and other specifications for the plastic liner being proposed to be used on any installations. Approval of this submission by the City Engineer shall be obtained prior to any material being delivered to the job site.

71-1.02B Clay Sewer Pipe: Vitrified clay pipe shall conform to the specifications for extra strength pipe of ASTM Designations: C-700 and C-301.

71-1.02C Ductile Iron Pipe: Ductile iron pipe shall comply with ANSI A21.51 (AWWA C151).

71-1.02D Polyvinylchloride (PVC) Sewer Pipe: Polyvinylchloride (PVC) sewer pipe and fittings up to fifteen inches (15") in diameter shall conform to one of ASTM Standard Specifications D-2680, D-3034, or F-949. Solid wall pipe shall have a pipe diameter to wall thickness ratio (SDR) of 35.

Polyvinylchloride (PVC) sewer pipe and fittings from eighteen (18") to thirty-six (36") inches in diameter shall conform to one of ASTM Standard Specifications S679 or F949. Solid wall pipe shall have an SDR value of 35.

Joints for the Polyvinyl pipe shall be push-on bell and spigot joints using elastomeric ring gaskets. The gaskets shall be securely fixed into place in the bells so they cannot be dislodged during joint assembly. The gaskets shall conform to ASTM Standard Specification F-477 for Elastomeric Seals (gaskets) for Joining Plastic Pipe, and shall be of a composition and texture which is resistant to common ingredients of sewage and industrial wastes, including oils and groundwater, and which will permanently endure under the conditions of the proposed use. The joints shall conform to ASTM Standard Specifications D-3212, "Joints for Drain and Sewer Pipe Using Flexible Elastomeric Seals.

71-1.02E Resilient Joint Material: Flexible compression joints in bell and spigot clay pipe and resilient joint materials to be used therein shall conform to the requirements of ASTM Designation: C 425.

71-1.02F Rubber Gasketed Joints: Rubber gasketed joints shall conform to the provisions in Section 65-1.06, paragraph referring to "Rubber Gasketed Joints".

71-1.02G Reinforcement: Reinforcement shall conform to the provisions in Section 52 of the Standard Specifications, "Reinforcement".

71-1.02H Concrete: Concrete shall conform to the provisions in Section 51 of the Standard Specifications, "Concrete Structures," and Section 90 of the Standard Specifications, "Portland Cement Concrete".

71-1.03 Excavation and Backfill: Excavation and backfill shall conform to the provisions of City of Brentwood Standard Plan ST-25, ST-25a and ST-25b.

The pipe shall be laid in a trench excavated to the line and grade shown on the approved plans. The bottom of the trench shall be graded and prepared to provide a firm and uniform bearing surface for the entire length of the pipe barrel.

Suitable excavation shall be made to receive the bell of the pipe and the joint shall not bear upon the bottom of the trench. All adjustment to line and grade shall be made by scraping away or filling in with Class II A.B. material under the body of the pipe, and not by wedging or blocking.

The use of recycled A.B. material shall not be allowed.

Trenches shall not be left open farther than 100 feet in advance of pipe laying operations or 100 feet to the rear thereof, unless otherwise permitted by the City Engineer. All trenches are to remain open until inspected and approved by the City Engineer.

The excavation shall be supported so it will be safe and the ground alongside the excavation will not slide or settle and all existing improvements, either on public or private property, will be fully protected from damage.

Backfill around manholes shall be Class II A.B. and shall be compacted to a minimum of 95%. In case of difficulty, a two-sack cement slurry may be used around the manholes as backfill.

All supports shall be removed after construction is completed, unless otherwise directed by the City Engineer and shall be withdrawn in a manner which will prevent the caving of the sides of the excavation. All openings caused by the removal of supports shall be filled with suitable material and properly compacted.

71-1.04 Bedding and Initial Backfill: Bedding shall be defined as material supporting, surrounding and extending to one foot above the top of the pipe. Where it becomes necessary to remove boulders or other interfering objects at subgrade for bedding, any void below such subgrade shall be filled with the bedding material designated in the Standard Plans and Specification. Where concrete is specified to cover the pipe, the top of the concrete shall be considered as the top of the bedding.

If soft, spongy, unstable, or other similar material is encountered upon which the bedding material or pipe is to be placed, this unsuitable material shall be removed to the depth approved by the City Engineer and replaced with bedding material suitably densified.

Bedding material shall first be placed so the pipe is supported for the full length of the barrel with full bearing on the bottom segment of the pipe equal to a minimum of 0.13 times the outside diameter of the barrel or 4" minimum whichever is greater. Densification of bedding for pipe shall be accomplished after the sheeting or shoring has been removed from the bedding

zone. Alternate methods of pipe laying recommended by the pipe manufacturer may be used if approved by the City Engineer.

Bedding material shall be Class II A.B. Pea gravel is not acceptable. No aggregate shall exceed 3/4".

71-1.05 Pipe Laying: - Pipe shall be protected during handling against impact shocks and free fall. Pipe will be carefully inspected in the field before and after laying. If any damage is discovered in a pipe after it has been laid, it shall be subject to rejection. Any corrective work shall be approved by the City Engineer and shall be at no cost to the City.

When connections are to be made to any existing pipe, conduit, or other appurtenances, of which the actual elevation or position cannot be determined without excavation, the Contractor shall excavate for, and expose, the existing improvement before laying any pipe or conduit at no cost to the City. City of Brentwood inspection shall be prior to the connection. When the new facilities interfere with the existing flow of sewage, the Contractor shall provide satisfactory bypass facilities at his expense.

The pipe shall be laid without break upgrade from structure to structure, with bell end upgrade.

All joints shall be cleaned and then sealed with the type of materials approved by the City. The material shall be recommended by the pipe manufacturer for the purpose intended and approved by the City Engineer, in order to obtain a watertight joint against leakage and infiltration under all conditions of expansion, contraction, and settlement.

Whenever the work ceases for any reason, the end of the pipe shall be securely closed with a tight fitting plug or cover.

Whenever existing pipes are to be cut or abandoned, the open ends of said pipes shall be securely closed by a tight fitting plug or wall of concrete not less than 2 feet thick, or by a tight brick wall no less than 8 inches thick with cement mortar joints.

Where groundwater occurs, the bottom of the trench shall be kept entirely free of water during the pipe laying, filling the joints, and as long thereafter as approved by the City Engineer.

Stoppers for pipes and branches left unconnected shall be made of the same material as the pipe or of resilient joint material conforming to Section 71-1.02E, "Resilient Joint Material". After placing the stopper, it shall be covered with a layer of sealant. The sealant shall be sufficiently fluid to ensure free flow around the stopper.

Concrete pipe with elliptical reinforcement shall be laid with the minor axis of the reinforcement cage in a vertical position.

Pipe shall be laid true to line and grade. Any pipe which is not in true alignment or shows any undue settlement after laying shall be taken up and relaid at the Contractor's expense.

Pipe sections shall be laid and joined in such a manner that the offset of the inside of the pipe at any joint will be held to a minimum at the invert. The maximum offset at the invert of pipe shall be 10 percent of the inside diameter of the pipe or 3/8-inch (9.5 mm), whichever is smaller. The following are the maximum offsets for a given pipe diameter:

6" Φ pipe	-	0.75"
8" Φ pipe	-	1.00"
10" Φ pipe	-	1.25"
12" Φ pipe	-	1.25"

In joining bell and spigot pipe, the spigot of each pipe shall be so seated in the bell of the adjacent pipe as to give a maximum of 3/8-inch (9.5 mm) annular space all around the pipe in the bell. Unavoidable offsets shall be distributed around the circumference of the pipe in such a manner that the minimum offset occurs at the invert.

When pipe is laid in a sheeted trench, all sheeting against which concrete cradle is to be placed shall be faced with at least one thickness of building paper and the sheeting shall be withdrawn without displacing or damaging the cradle.

After the joints have been made, the pipe shall not be disturbed in any manner.

71-1.06 Pipe Joints:

1. Vitrified Clay Pipe - Either polyvinyl chloride or polyurethane compression joints may be used. Materials shall conform to ASTM Designation: C-425.

Joints shall contain two sealing components, one bonded to the outside of the spigot and the other bonded to the inside of the bell. Sealing components shall be a plasticized polyvinyl chloride compound or polyurethane elastomer bonded to pipes and fittings at the pipe factory, and shall be cured to a uniform hardness and compressibility. The sealing components shall be shaped, sized, bonded, and cured in such a manner as to form a tight, dense, and homogeneous compression coupling when the joint is assembled. Any imperfection in the sealing components will be cause for rejection.

Upon installation, the meeting surfaces shall be wiped clean of dirt and foreign matter, then an approved lubricant shall be applied to the joint surfaces. The spigot shall be positioned inside the bell and the joint shoved home. For large diameter pipe, a lever attachment or bar cushioned with a wooden block shall be used to shove the joint into place.

In no case shall a bar be used on an unprotected joint surface. Mating surfaces shall be in tight contact with each other upon completion of the joint installation.

2. Reinforced Concrete Pipe - All reinforced concrete sanitary sewer pipe shall be joined with rubber gasketed joints.

Rubber gasketed joints shall conform to the requirements of ASTM Designation: C443 and shall be flexible and able to withstand expansion, contraction and settlement.

All rubber gaskets shall be stored in a cool place as practicable, preferably at 70° or less, and in no case shall the rubber gaskets be exposed to the direct rays of the sun for more than 72 hours.

Rubber gaskets, of the type requiring lubrication, shall be lubricated with the lubricant recommended and supplied by the manufacturer of the pipe.

The ends of the pipe shall be formed so when the pipes are laid together and joined, they shall make a continuous and uniform line of pipe with a smooth and regular surface.

Joints shall be watertight and flexible. Each joint shall contain a solid gasket of rubber or other material approved by the Engineer, which shall be the sole element responsible for water-tightness of the joint. This gasket shall be of circular cross section unless otherwise approved by the City Engineer. The length and cross sectional diameter of the gasket, the annular space provided for the gasket, and all other joint details shall be such as to produce a watertight joint. The slope of the longitudinal gasket contact surfaces of the joint with respect to the longitudinal axis of the pipe shall not exceed 2 degrees.

Under ordinary laying conditions, the work shall be scheduled so the bell end of the pipe faces in the direction of laying. Prior to placing the spigot into the bell of the pipe previously laid, the spigot groove, the gasket and the inside of the bell shall be thoroughly cleaned. Then the spigot groove, the gasket and the first 2 inches (50.8 mm) of the inside surface of the bell shall be lubricated with a soft vegetable soap compound.

The gasket shall be uniformly stretched when placing it on the spigot so the gasket is distributed evenly around the circumference. The gasket shall be lubricated as per manufacturer's recommendations.

For pipe in which the inside joints are to be pointed, suitable spacers shall be placed against the inside shoulder of the bell to provide the proper space between abutting ends of the pipe.

After the joint is assembled, a thin metal feeler gage shall be inserted between the bell and the spigot and the position of the gasket checked around the complete circumference of the pipe. If the gasket is not in the proper position, the pipe shall be withdrawn, the gasket checked to see it is not cut or damaged, the pipe relaid, and the gasket position again checked.

3. Cast Iron or Ductile Iron Pipe - Cast and ductile iron pipe joints shall comply with the following requirements for the types shown:

<u>Type of Joint</u>	<u>Specification</u>
Slip-on	ANSI A21.11 (AWWA C111)
Mechanical Joint	ANSI A21.11 (AWWA C111)
Flanged Joint	ANSI B16.1, B.16.2, ANSI A21.10 (AWWA C110)
Flanged Joint (Threaded Flanges)	ANSI B2.1

All rubber gaskets, push-on, mechanical and flanged joint fittings for cast iron or ductile iron pipe shall be manufactured in accordance with ANSI A21.10 (AWWA C110).

Slip-on Joint - The gasket and gasket seal inside the bell shall be wiped clean before the gasket is inserted. A thin film of soft vegetable soap compound shall be applied to the gasket and the outside of the spigot end of the pipe. The spigot shall then be positioned inside the bell and shoved home. Lubricant other than that furnished with the pipe shall not be used unless approved by the City Engineer.

Mechanical Joints - The outside of the spigot and the inside of the bell shall be thoroughly cleaned of foreign matter. The gland and gasket shall then be slipped onto the spigot end of the pipe. The gasket shall be pressed evenly into the bell only after the spigot is seated in the bell. The gland shall be brought up evenly by tightening alternately the nuts spaced 180 degrees apart. Bolts and nuts shall be coated with mastic following tightening.

Flanged Joints - Flanged joints shall be firmly and fully bolted with machine bolts of proper size. Full circle reinforced neoprene rubber gaskets 1/16" thick shall be used at all flanged joints. Bolts and nuts shall be coated with mastic following tightening.

71-1.07 Existing Manholes: Existing manholes shall be adjusted to grade, removed and replaced, repaired or abandoned as shown on the plans and in accordance with the provisions of Section 15 of the Standard Specifications, "Existing Highway Facilities."

When designated on the plans, or directed by the City Engineer, existing manhole frames and covers shall be reset on new structures. Upon completion of the adjustment of existing manholes to grade, the manhole cover shall conform to the planed surface as specified for the finished asphalt concrete surface, Section 39 of the Standard Specifications.

Unless otherwise specified on the plans, all existing manholes, lampholes and terminal cleanout frames and covers which are removed become the property of the City of Brentwood and shall be delivered to the City Corporation Yard.

71-1.08 Sewer Structures: New manholes for sewers shall be constructed in accordance with the details shown on the Standard Plans, as specified in this Section and as directed by the City Engineer.

Precast manholes shall conform to City of Brentwood Standard Plans SS-2 and SS-3, and as shown on the plans as well as to the applicable sections in Section 70 of the Standard Specifications, "Miscellaneous Facilities" except for measurement and payment.

Manhole frames shall be secured to the manhole structure or riser barrels with full mortar bed or full circle concrete collar which will effectively secure the frame to the manhole structure and provide a uniform bearing for the frame.

Concrete for sewer structures shall be Class A as described in Section 90-1.01 unless otherwise shown on the plans.

When the manhole is located in the pavement area, it shall not be constructed to final grade until pavement has been completed.

Water stops shall be required at all sewer manholes; location will be at the discretion of the City Engineer.

Where new work is jointed to the surface of unfinished work, the latter shall be thoroughly cleaned.

All joints on the inside of structures and sewers shall be neatly struck and pointed where plastering is not specified on the plans.

The inside bottoms of existing manholes, where new connections are made, and of new manholes shall be shaped to provide "flow-through" channels conforming to the size and shape of the lower portion of the inlets and outlets of the manholes. The channels shall vary uniformly in size and shape from inlet to outlet.

No pipe shall project into a manhole and in no case shall the bell of a pipe be built into the wall of a manhole or structure.

All concrete shall be cured for a period of not less than 7 days after being placed and shall be protected in place from damage.

71-1.09 Coating Manholes:

General - The interior of all sanitary sewer manholes downstream from pump stations, drop manholes, manhole pumping stations, all manholes constructed on sewer lines 24 inches and larger, and any other structure where the City Engineer determines hydrogen sulfide gas may be a problem shall receive a polyurethane coating.

Material - The coating shall be a high build, two-component, 100% solid, non-solvented, hybrid polyurethane material. The flash point of the individual components and the fluid mixture shall be a minimum of 415 degrees F (COC). Application shall be 125 mils in thickness.

The cured coating shall have a Shore D hardness of 57 at 77 degrees F and shall be capable of passing the flexibility test as prescribed by ASTM D-1737 using an 8-mm diameter mandrel. The coating shall have a minimum tensile strength of 2,500 PSI and a recoverable elongation of 30% minimum. It shall have good impact resistance and shall be able to bridge up to 1/8-inch settling crack, which may take place in the concrete structure, without damage to the coating. The coating shall be capable of repair at any time during its life.

At a minimum, the coating shall be resistant to attack from the following but not limited to: Oxidizing agents such as bleaches, sulfuric, acetic, hydrochloric, phosphoric, nitric, chromic, oleic, and stearic acids, sodium and calcium hydroxides, ammonium, sodium, calcium, magnesium, and ferric chlorides, ferric sulfate, petroleum oils and greases, vegetable and animal oils, fats, greases, soaps and detergents. The coating shall be impermeable to sewage gases and liquids and shall be nonconductive to bacterial or fungus growth.

Surface Preparation - New concrete shall be cured 30 days. All foreign matter shall be removed from the surface of old concrete using solvents (no alcohol shall be used) if necessary to remove grease. For old concrete all surfaces to be coated will be sandblasted or waterblasted to remove all residue, loose grout or loose brick. Surfaces of new concrete shall be washed with ten percent (10%) muriatic acid solution and flushed with water to remove lime. Surfaces, which have retained a glossy smooth surface, shall be abrasive waterblasted, sandblasted or power wire brushed to produce a satisfactory anchor for the coating. The surface must be dry when applying the coating. Cracks shall be sealed by spraying directly into the crack and then overcoating while still tacky.

Any steel surfaces in the area to be coated will be prepared and primed as required.

After blast cleaning the surface as described above, the surfaces of the concrete shall be dried by air blowing for four hours.

Application - The polyurethane coating shall be applied by high-pressure airless spray with the two components mixing just before the spray gun. During application, the applicators, including any persons in the immediate area, shall wear protective clothing including facemasks, and anyone in the manhole during spraying shall be supplied a respirator.

71-1.10 Trench Resurfacing: Trenches in existing streets, except streets which are to be closed or abandoned, shall be resurfaced with the type and thickness of bases, surfacing or pavement shown on the plans or designated by the City Engineer. Unless otherwise specified, trench resurfacing shall be accomplished in accordance with the Standard Plans ST-25a and ST-25b.

Upon notice from the City Engineer, the Contractor shall proceed immediately to resurface any part of any excavation, without waiting for completion of the full length of the sewer.

All trenches shall be backfilled, patched with a minimum of 3" of cutback, and rolled to provide a smooth transition between the temporary and existing pavement at the end of each working day. Any temporary trench patching shall be subject to the approval of the City Engineer. Using tires of heavy equipment to roll the temporary paving is not considered acceptable.

71-1.11 Testing:

71-1.11A Cleaning: Prior to performing tests, the pipe installation shall be thoroughly cleaned. Cleaning shall be performed by the Contractor by means of an inflatable rubber ball. The ball shall be of a size which will inflate to fit snugly into the pipe to be tested. The ball shall be controlled with a tag line. The ball shall be placed in the last manhole on the pipe to be cleaned, and water shall be introduced behind it. The ball shall pass through the pipe with only the pressure of the water propelling it. All debris flushed out ahead of the ball shall be removed at the first downstream manhole. In the event cement or wedged debris or a damaged pipe shall stop the ball, the Contractor shall remove the obstruction.

71-1.11B General: All leakage tests shall be completed and approved following the placement and densification of the backfill, but prior to placing of permanent surfacing.

When leakage or infiltration exceeds the amount allowed by the Specifications, the Contractor at his expense shall locate the leaks and make the necessary repairs or replacements in accordance with the Specifications to reduce the leakage or infiltration to the specified limits. Any individually detectable leaks shall be repaired, regardless of the results of the tests. Air pressure tests shall be made on completed pipelines.

71-1.11C Air Pressure Test: The Contractor shall furnish all materials, equipment and labor for making an air test. Air test equipment shall be approved by the City Engineer.

Each section of sewer shall be tested between successive manholes by plugging and bracing all openings in the main sewer line and the upper ends of all house connection sewers. Prior to any air pressure testing, all pipe plugs shall be checked with a soap solution to detect any air leakage. If any leaks are found, the air pressure shall be released, the leaks eliminated, and the test procedure started over again.

The final leakage test of the sewer main line and branching house connection sewers, shall be conducted in the presence of the City Engineer in the following manner:

1. Clean pipe to be tested by propelling snug fitting inflated rubber ball through the pipe with water.
2. Plug all pipe outlets with suitable test plugs. Brace each plug securely.
3. If the pipe to be tested is submerged in ground water, insert a pipe probe by boring into the backfill material adjacent to the center of the pipe, and determine the pressure in the probe when air passes slowly through it. This the back pressure due

to ground water submergence over the end of the probe. All gauge pressures in the test should be increased by this amount.

4. Add air slowly to the portion of the pipe installation under test until the internal air pressure is raised to 4.0 psig.
5. After an internal pressure of 4.0 psig is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure.
6. When pressure decreases to 3.5 psig, start stopwatch.

**MINIMUM HOLDING TIME IN SECONDS REQUIRED FOR PRESSURE
TO DROP FROM 3½ TO 2½ PSIG**

Sec s	PIPE DIAMETER													
	4"	6"	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"	39"
25	4	10	18	28	40	62	89	121	158	200	248	299	356	418
50	9	20	35	55	79	124	178	243	317	401	495	599	713	
75	13	30	53	83	119	186	267	364	475	601	743	898	102	837
100	18	40	70	110	158	248	356	485	634	765	851	935		110
125	22	50	88	138	198	309	446	595	680					
150	26	59	106	165	238	371	510							
175	31	69	123	193	277	425								
200	35	79	141	220	317									
225	40	89	158	248	340									
250	44	99	176	275										
275	48	109	194	283										
300	53	119	211											
350	62	139	227											
400	70	158												
450	79	170												
500	88													
559	97													
600	106													
650	113	170	227	283	340	425	510	595	680	765	851	935	102	110

NOTES:

- (1) To be used when testing one diameter only.
- (2) The above air pressure test procedure is based on ASTM C828. Any special situations or conditions shall conform to this ASTM Standard.

SAFETY NOTE:

The air test may be dangerous if, because of ignorance or carelessness, a line is improperly prepared. It is extremely important the various plugs be installed and braced in such a way as to prevent blowouts. Inasmuch as a force of 250 lbs. is exerted on an 8" plug by an internal pipe pressure of 5 psi, it should be realized sudden expulsion of a poorly installed plug or of a plug which is partially deflated before the pipe pressure is released can be dangerous.

As a safety precaution, pressurizing equipment should include a regulator set at 6-8 psi to avoid over pressurizing and damaging an otherwise acceptable line. No one shall be allowed in the manholes during testing.

IF THE TIME LAPSE IS LESS THAN THAT SHOWN IN THE TABLE, THE CONTRACTOR SHALL MAKE THE NECESSARY CORRECTIONS TO REDUCE THE LEAKAGE TO ACCEPTABLE LIMITS.

71-1.11D Televising of Sanitary Sewers: Following the placement and densification of backfill and completion of other required testing, but prior to the placing of pavement, the City requires the Contractor to televise all sewer lines for conformance to the plans and specifications. If any defective pipe or condition is discovered by televising, it shall be corrected at no cost to the City. Any corrective work proposed shall be approved by the City Engineer.

The City may also require televising of sewer lines, at no cost to the City, prior to the expiration of the one-year warranty. If a defective condition is unaccountably found, it shall be presumed to be caused by defective workmanship or materials. The Contractor shall be notified and shall correct the work in a manner approved by the City Engineer.

The Contractor shall furnish to the City the results of the televising on a DVD format. The Contractor shall assume all labor and material costs to televise the pipelines.

71-1.11E Manhole Vacuum Test: All manhole testing shall be done in the presence of the City Engineer or his authorized representative. The Contractor shall furnish all labor, materials, tools and equipment necessary to perform the test and any work incidental thereto. Any damage resulting from testing shall be repaired by the Contractor at his/her expense.

All sanitary sewer manhole vacuum tests shall be completed and approved by the City Engineer following placement and densification of the backfill around the manhole, but prior to placing of permanent surfacing.

The Contractor shall test the manhole up to and including the cone, and shall make all repairs necessary to achieve a final passing test. All lift holes shall be filled with non-shrink grout prior to testing. All manhole sections shall be visually inspected for leaks. Any cracks or leaks shall be repaired by the Contractor prior to any testing. All repairs shall be made with non-shrink grout. Any alternate repair methods shall be approved by the City Engineer.

All pipe inlets and outlets in the manhole shall be securely plugged to sufficiently hold against vacuum pressure during testing, and removed following successful completion of the testing. A rubberized test plate shall be placed on the manhole dome after potential leaks on the top of the dome have been sealed.

A suitable vacuum pump shall be used to reduce the pressure inside the manhole to a vacuum of ten (10) inches of mercury, stabilizing the vacuum at ten (10) inches of mercury for one (1) minute. The vacuum pump shall be shut off, and with the valves closed, the pressure increase (loss of vacuum) shall be measured inside the manhole during the test hold period. The

maximum allowable pressure increase (loss of vacuum) shall be one (1) inch of mercury over a 60-second test hold period.

If the vacuum drops below nine (9) inches of mercury within the test period, the leakage shall be considered excessive. The Contractor shall make all repairs necessary to achieve a passing test and the manhole shall be retested. Manhole repairs and retesting shall proceed until a passing test is completed.

SECTION 75

MISCELLANEOUS METAL

The following is added to section 75-1.02 of the Standard Specifications:

75-1.02A Manhole Frames and Covers: Gray iron castings shall conform to and/or exceed the requirements of ASTM A48-76, Class 30 and test bar size shall be as stated in Table I. Current certified test reports shall be furnished with units furnished.

In addition, current certified test reports for testing in accordance with AASHTO H-20 loadings shall be furnished.

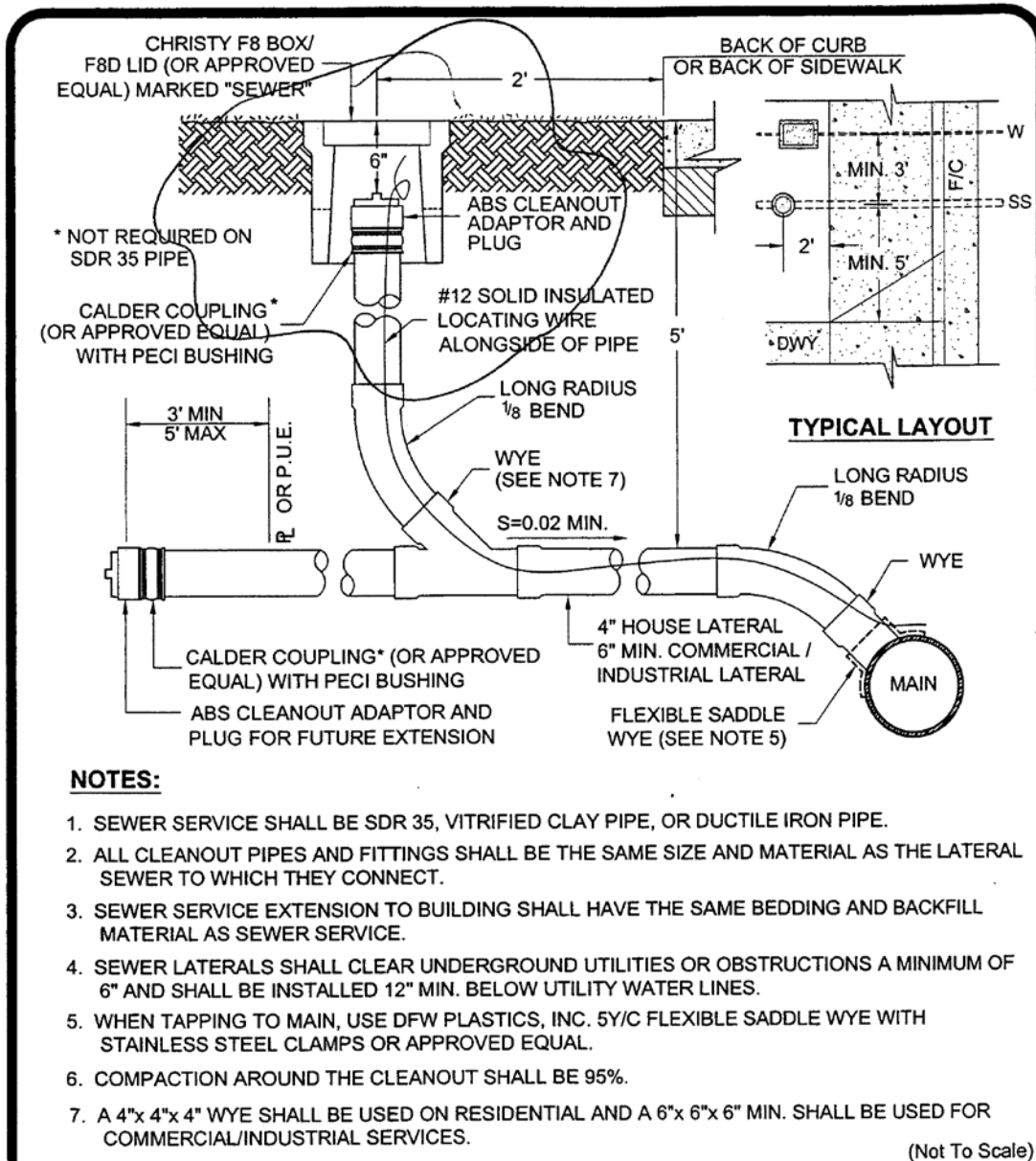
Units furnished must be identifiable with reference to the above tests.

Machined surface tolerances shall produce true, uniform bearing surfaces.

All frames and lids shall be interchangeable with like seat design and dimensional fit tolerances shall not exceed those allowed on designated specified units detailed on the Standard Plans.

Manhole frame and covers and catch basin frames and covers shall be galvanized.

Section 75-1.02B Identifying Castings: All gray iron castings shall be marked on the top surface with the manufacturer's name, initials or logotype. Such marking shall be made by means of stamping, cast-in-mold lettering, etching, or engraving. In addition, the manhole cover shall have the "City of Brentwood" labeled on it as well as the facility (i.e. storm drain, sewer, water, etc.). All materials shall be made in U.S.A.



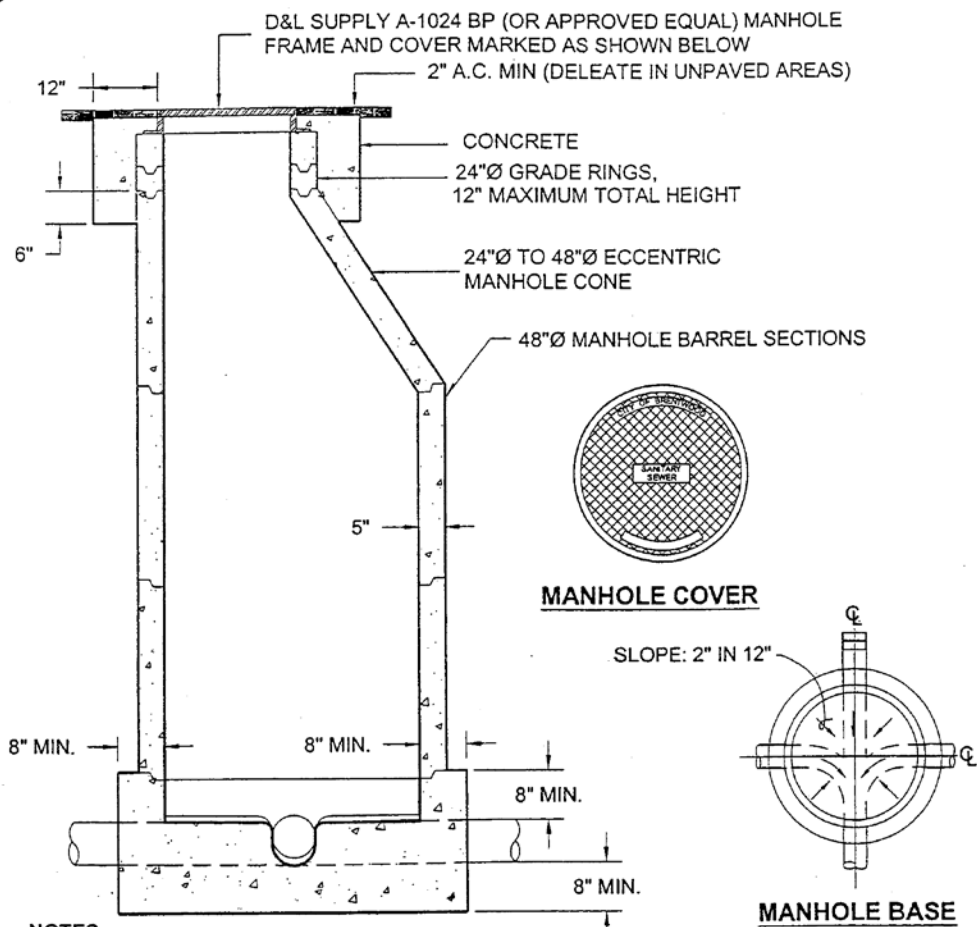
**ENGINEERING
DEPARTMENT**

STANDARD SEWER SERVICE

B. S. Grewal
BALWINDER S. GREWAL CITY ENGINEER

DATE: FEB. 8, 2001
REVISED: JULY 31, 2003

SHEET NO.
SS-1



NOTES:

1. FOR PIPES UP TO 21" IN DIAMETER; SEE SS-3 FOR SEWER LINE 20' OR DEEPER.
2. FORM BASE TO PROVIDE A SMOOTH FLOW CHANNEL.
3. ALL CONCRETE TO BE CLASS A, 3000 P.S.I. MIN.
4. 1:3 GROUT MIX OR 3" RAM-NEK JOINT COMPOUND (OR APPROVED EQUAL) IN ALL JOINTS INSIDE AND OUT.
5. ALL MANHOLES SHALL BE VACUUM TESTED PER CITY SPECIFICATIONS.
6. MANHOLE BASE SHALL EXTEND 18" OUTSIDE BARREL WHEN CONSTRUCTED IN SAND.
7. BACKFILL AROUND MANHOLE SHALL BE CLASS II A.B. COMPACTED TO 95%.



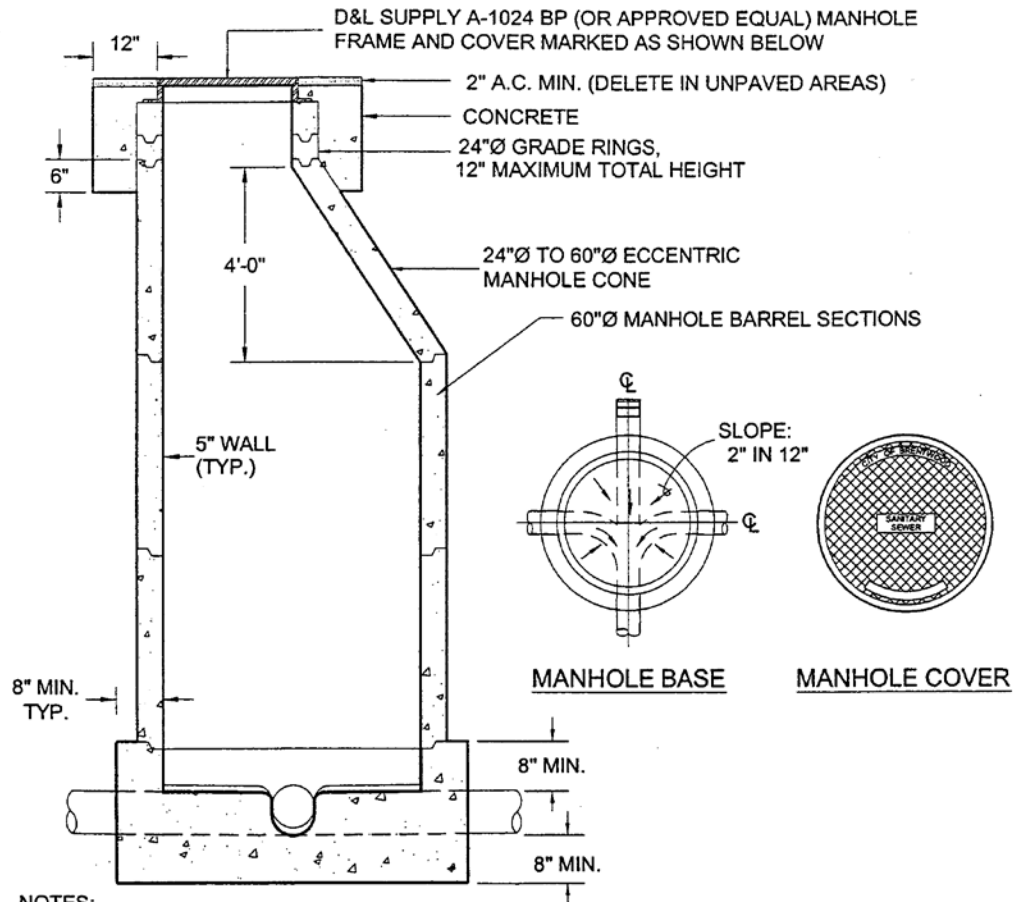
**ENGINEERING
DEPARTMENT**

SANITARY SEWER MANHOLE

John E. Stevenson
JOHN E. STEVENSON CITY ENGINEER

DATE: APR. 15, 1999
REVISED: OCT. 31, 2000

SHEET NO.
SS-2



NOTES:

1. FOR PIPES LARGER THAN 21" IN DIAMETER AND WHERE SEWER LINE IS 20' OR MORE IN DEPTH.
2. FORM BASE TO PROVIDE A SMOOTH FLOW CHANNEL.
3. ALL CONCRETE TO BE CLASS A, 3000 P.S.I. MIN.
4. 1:3 GROUT MIX OR 3" RAM-NEK JOINT COMPOUND (OR APPROVED EQUAL) IN ALL JOINTS, INSIDE AND OUT.
5. ALL MANHOLES SHALL BE VACUUM TESTED PER CITY SPECIFICATIONS.
6. BACKFILL AROUND MANHOLE SHALL BE CLASS II A.B. COMPACTED TO 95%.

(Not To Scale)



**ENGINEERING
DEPARTMENT**

LARGE SANITARY SEWER MANHOLE

JOHN E. STEVENSON

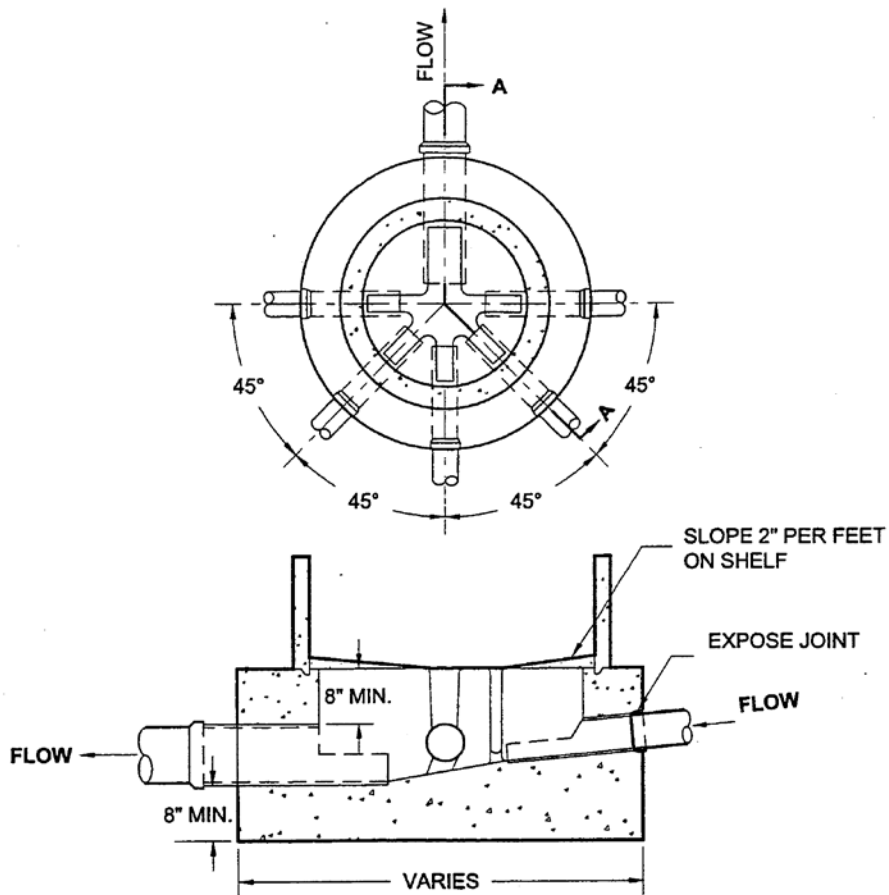
CITY ENGINEER

DATE: JUN. 18, 1999

REVISED: OCT. 31, 2000

SHEET NO.

SS-3



NOTES:

1. NO SIDE SEWER CONNECTIONS SHALL BE MADE IN DOWNSTREAM HALF OF THE MANHOLE.
2. MAXIMUM NUMBER OF SIDE SEWERS ALLOWED PER MANHOLE = 5.
3. TOP OF SIDE SEWERS SHALL MATCH TOP OF OUTLET PIPE.

(Not To Scale)



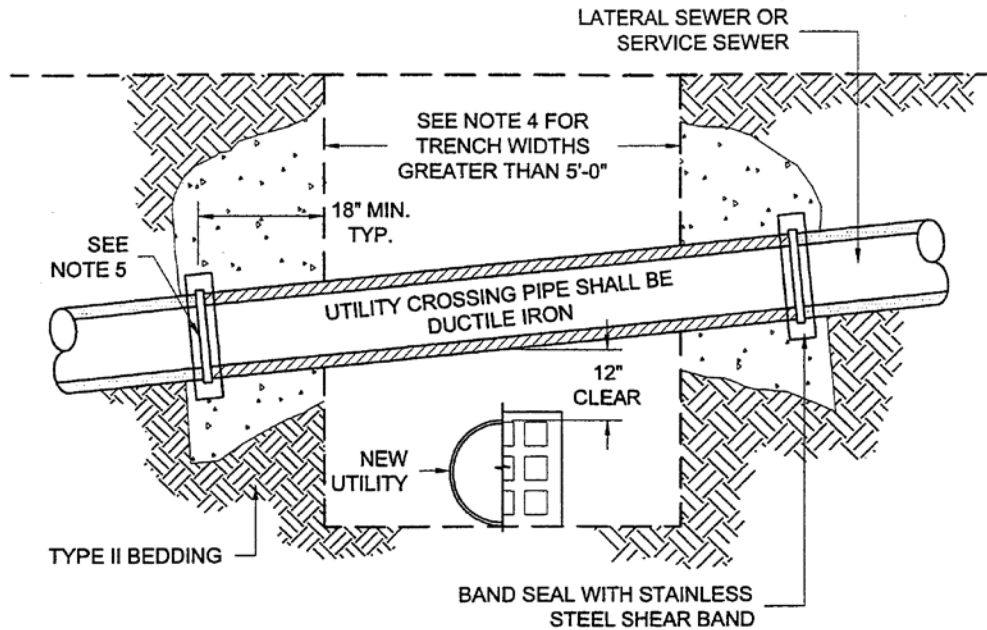
**ENGINEERING
DEPARTMENT**

SANITARY TERMINAL MANHOLE BASE

John E. Stevenson
JOHN E. STEVENSON
CITY ENGINEER

DATE: MAY 28, 1999
REVISED:

SHEET NO.
SS-4



NOTES:

1. THIS DETAIL SHALL APPLY WHENEVER THE LATERAL OR SERVICE SEWER IS CUT OR DAMAGED OR WHENEVER CONSTRUCTION PASSES BENEATH THE LATERAL OR SERVICE SEWER.
2. THE INSIDE DIAMETER OF UTILITY CROSSING PIPE SHALL BE THE SAME AS THE PIPE TO WHICH IT CONNECTS.
3. ALTERATION OF SEWER GRADES WILL BE PERMITTED ONLY AFTER WRITTEN PERMISSION HAS BEEN RECEIVED FROM THE CITY OF BRENTWOOD ENGINEERING DEPARTMENT.
4. WHENEVER THE SPAN, WHETHER CAUSED BY TRENCH WIDTH OR CROSSING ANGLE OF UTILITY PIPE EXCEEDS 5'-0", THE BEDDING MATERIAL SHALL BE PLACED TO 6" ABOVE THE PIPE AND 18" ON EACH SIDE OF ITS CENTER LINE.
5. SIDE OF SEWER PIPE SHALL BE TRIMMED TO A CLEAN CUT UNDAMAGED END WITH A MECHANICAL PIPE CUTTER.

(Not To Scale)



**ENGINEERING
DEPARTMENT**

UTILITY CROSSING

JOHN E. STEVENSON

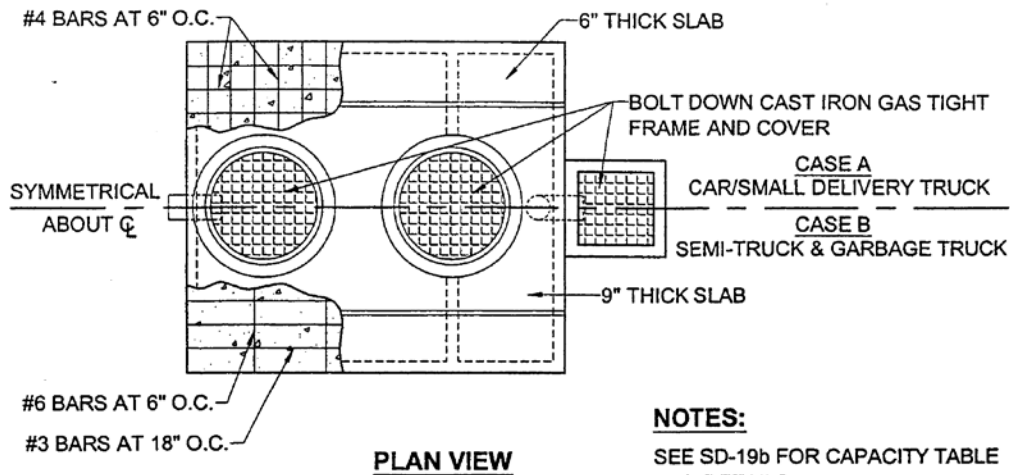
CITY ENGINEER

DATE: MAY 28, 1999

REVISED:

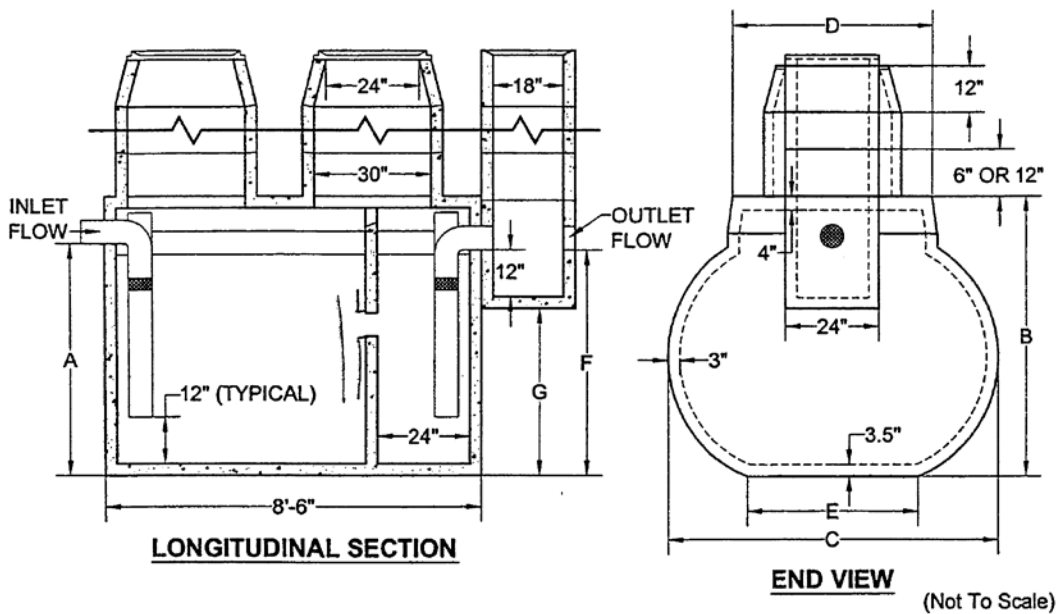
SHEET NO.

SS-5



NOTES:

SEE SD-19b FOR CAPACITY TABLE AND DETAILS.



**ENGINEERING
DEPARTMENT**

GREASE INTERCEPTOR DETAILS

[Signature]
JOHN E. STEVENSON
CITY ENGINEER

DATE: MAR. 14, 2001
REVISED:

SHEET NO.
SD-19a

NOTES:

1. EXTEND CONCRETE SLAB 1' PAST EXCAVATION IN ALL DIRECTIONS.
2. MATERIAL SPECIFICATIONS: (A) CONCRETE, PORTLAND CEMENT TYPE II MINIMUM COMPRESSIVE STRENGTH 3000 P.S.I. AT 28 DAYS; (B) REINFORCING BAR INTERMEDIATE GRADE ASTM A615; (C) REINFORCING WELDED WIRE MESH ASTM A185.
3. INTERCEPTOR SHALL BE COATED INSIDE WITH HUNTS PROCESS BLACK NO. 120 ASTM C-309. TYPE IV-ASTM D-41-FHA REQUIREMENTS.
4. PRECAST UNIT SHALL BE PLACED ON NATURAL SOIL OR APPROVED COMPACTED FILL.
5. STANDARD GROUND WATER SEAL SHALL BE BUTYL ROPE MASTIC OR APPROVED COMPACTED FILL.
6. THIS GREASE INTERCEPTOR IS NOT INTENDED FOR THE INTRODUCTION OF DOMESTIC SEWAGE. LOCATION AND TRIBUTARY DISCHARGE SOURCES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
7. GREASE INTERCEPTORS LOCATED IN AREA SUBJECT TO TRAFFIC MUST BE INSTALLED WITH TRAFFIC COVER.
8. ALL PIPE SIZES MUST BE 6" MIN. OR AS SPECIFIED ON THE DRAWINGS.

CAPACITY IN GALLONS	A	B	C	D	E	F	G
750	3'-10"	5'-0"	3'-4"	3'-10"	3'-6"	3'-8"	2'-5"
1,000	4'-4"	5'-4"	5'-11"	4'-3"	4'-1"	4'-2"	2'-11"
1,200	5'-0"	6'-0"	6'-11"	4'-3"	3'-11"	4'-10"	3'-7"
1,500	5'-0"	6'-0"	6'-11"	5'-3"	4'-11"	4'-10"	3'-7"

EXCAVATION SPECIFICATIONS			
CAPACITY IN GALLONS	DEPTH BELOW INLET	LENGTH	WIDTH
750	3'-10"	11'-0"	6'-4"
1,000	4'-4"	11'-0"	7'-0"
1,200	5'-0"	11'-0"	7'-0"
1,500	5'-0"	11'-0"	8'-0"



**ENGINEERING
DEPARTMENT**

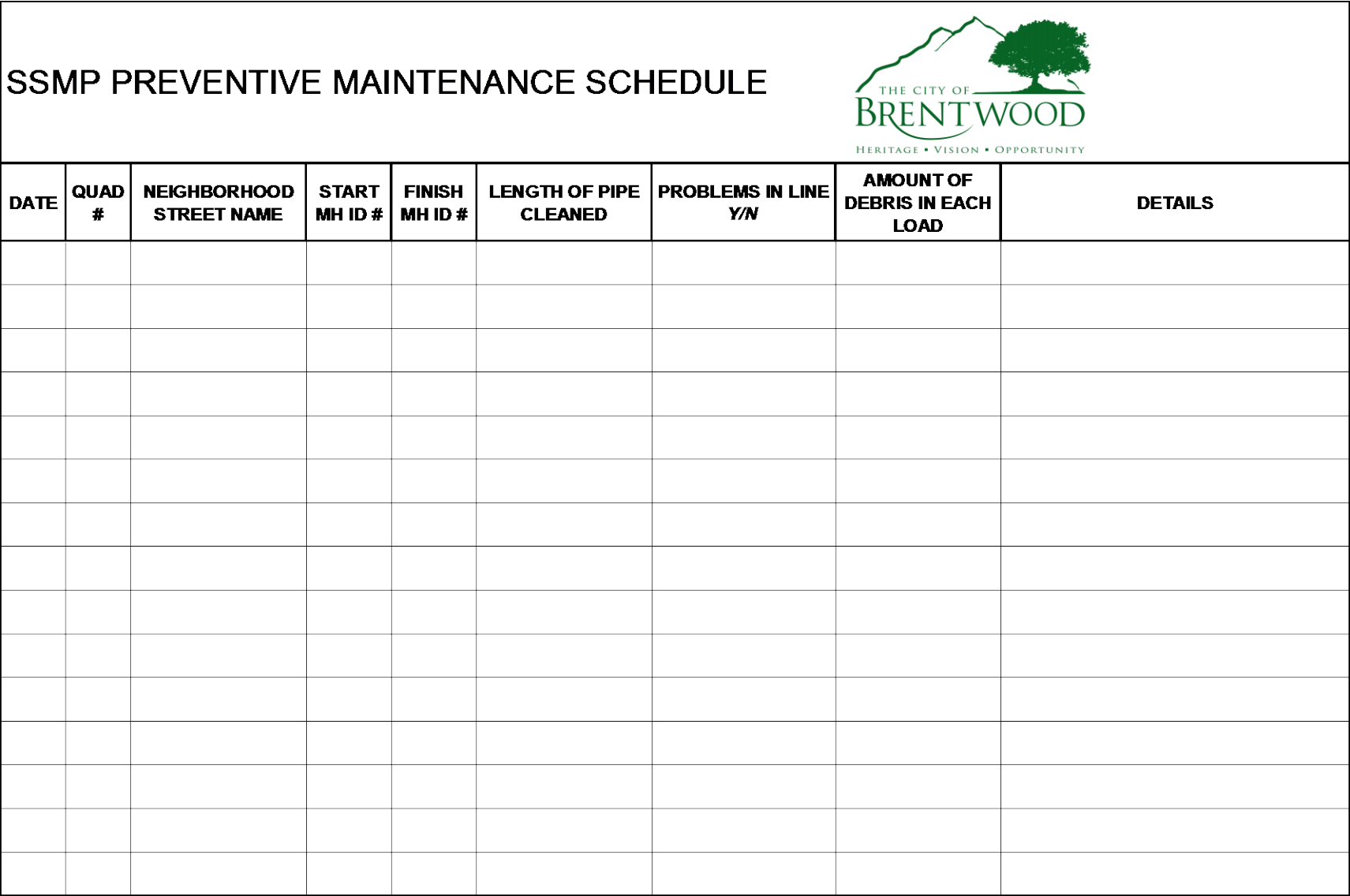
GREASE INTERCEPTOR NOTES

[Signature]
JOHN E. STEVENSON
CITY ENGINEER

DATE: MAR. 30, 2001
REVISED:

SHEET NO.
SD-19b

APPENDIX G

[illegible]

APPENDIX H

City of Brentwood 2013 SSMP Internal Audit

Table of Contents

Introduction.....	1
Background and System Overview.....	1
Summary of SSO Events and Data Since the Last SSMP Audit.....	2
Audit Approach.....	6
1. Audit of Goals – State4 Order D.13.i	6
2. Audit of Organization – State Order D.13.ii.....	8
3. Audit of Legal Authority – State Order D.13.iii.....	9
4. Audit of Operation and Maintenance Program – State Order D.13.iv.....	9
5. Audit of Design and Performance Provisions – State Order D.13.v	10
6. Audit of Overflow Emergency Response Plan – State Order D.13.vi.....	10
7. Audit of FOG, (Fata, Oils, and Grease) Control Plan – State Order D.13.vii	11
8. Audit of System Evaluation and Capacity Assurance Plan – State Order D.13.viii.....	11
9. Audit of Monitoring, Measurement, and Program Modifications – State Order D.13.ix.....	12
10. Audit of SSMP Program Audits – State Order D.13.x	13
11. Audit of Communication Program – State Order D.13.xi	14

Introduction

On May 2, 2006, the California State Water Resources Control Board adopted Order No. 2006-0003, (State Order) to create an equitable statewide mechanism to manage all publicly owned wastewater collection agencies with more than one mile of pipeline, to reduce the number and severity of Sanitary Sewer Overflows, (SSOs) and to set up a central depository for online reporting of SSOs when they do occur.

A principal element of the State Order is the requirement that the collection agencies adopt and maintain a management plan for the system, referred to as a Sewer System Management Plan, (SSMP).

The City of Brentwood's SSMP was certified and implemented on July 31, 2009, in accordance with the State Order.

One of the provisions of the State Order is that agencies perform an internal audit of the SSMP every two years. These audits are to focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in section D.13, including identification of any deficiencies in the SSMP and what steps are/will be taken to correct them. The due date for this audit is March 15, 2013.

The SSMP must be updated every five years and the update must include any significant program changes. If significant changes are made, the SSMP must be re-certified by the City Council. The due date for re-certification of the SSMP is July 31, 2014.

Background and System Overview

The City of Brentwood, (City) was incorporated in 1948 as a General Law City. The City is predominately a bedroom community of approximately 52,000 residents which collects and treats wastewater generated primarily by domestic, (household) users. The City currently has no categorical significant industrial users. The bulk of the commercial businesses are retail food establishments, retail grocery stores, home improvement centers, and retail department stores.

The City has a service area of nearly 12 square miles with roughly 188 miles of City owned and maintained sanitary sewer piping systems and two lift stations. The City's sewer mains range in diameter from six inches to 42 inches with approximately 80% of these lines being eight inches in diameter or smaller. Almost all of the sewer laterals are four inches in diameter. Similar to other organizations, the City owns a portion of the sewer laterals. The City owns the "lower" lateral, from the edge of the property line to the sewer main.

Summary of SSO Events and Data

The City of Brentwood had two SSO events in 2011, (total volume = 15 gallons) and three SSO events in 2012 (total volume = 857 gallons). This equates to an average ratio of 1.06 and 1.60 SSO events per 100 miles of sewer main in 2011 and 2012 respectively. These ratios are considered to be indicative of a very high performing Collection System. A 6-year historical chart, (Figure 1) shows the City consistently has a very high performing Collection System with a 6-year average ratio of 0.96 SSO events per year per 100 miles of sewer main.

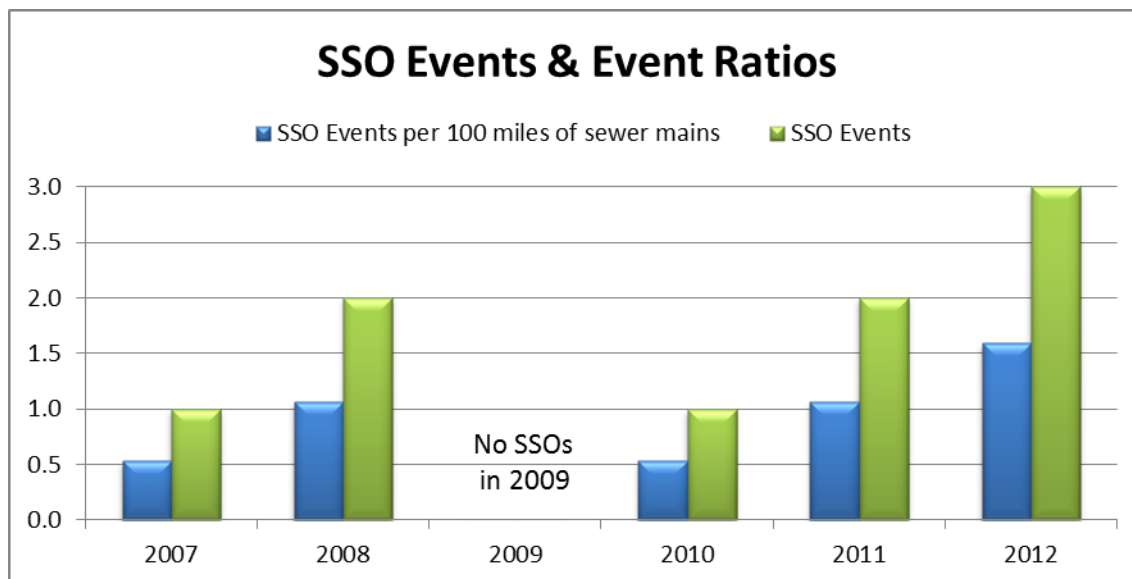


Figure 1

Figure 2 shows a 6-year history of SSO volumes. Of the 1,241,000,000 gallons of sewage that flowed through the City's Collection System in 2012 only 857 gallons were lost due to SSOs. Since the City began measuring SSOs, the highest annual total of SSO volume was 1225 gallons. The 6-year average total SSO volume is 541 gallons per year, with a per-event average volume of 334 gallons. Considering the five SSOs in 2011 and 2012, the average volume of sewage overflow per event was 190 gallons, which is below the 6-year average.

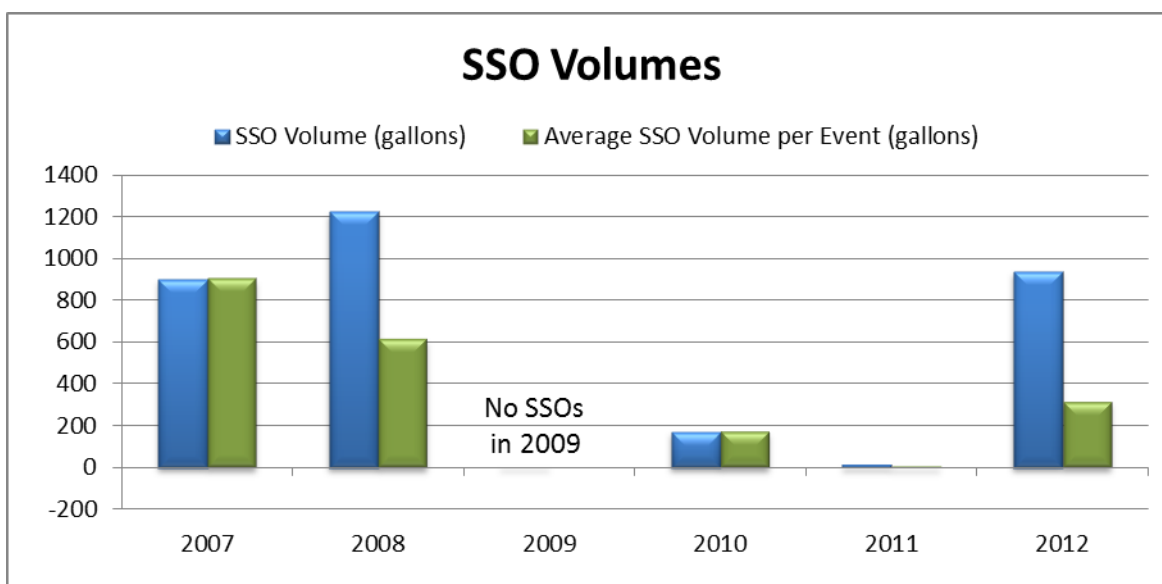


Figure 2

Summary of SSO Events and Data *(Continued)*

Of the SSOs recorded since the State Order became effective, the City has kept track of the volume and percentage of each overflow which is recovered and not discharged to a water of the State. Since 2007, the City has averaged an SSO recovery rate of 73% (Figure 3).

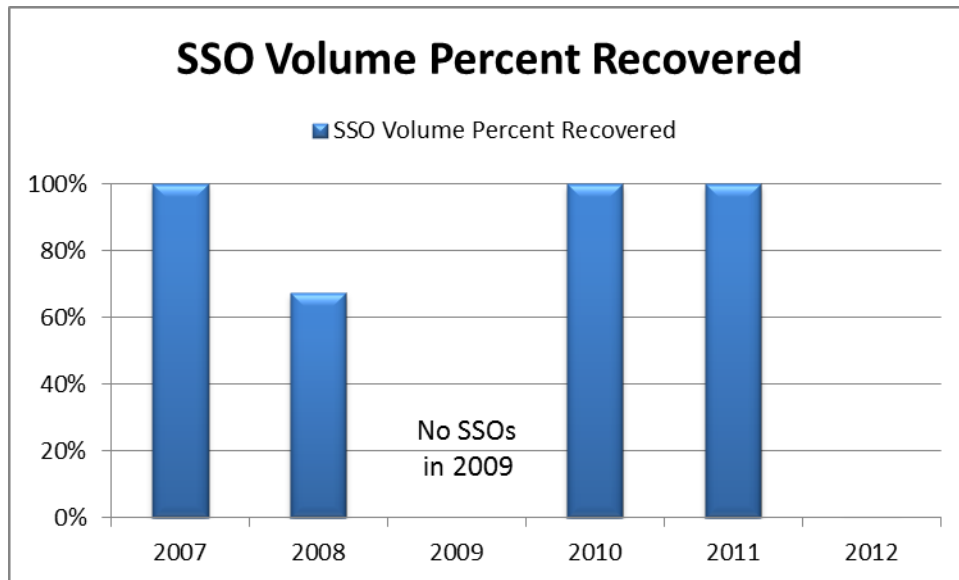


Figure 3

Table 1 below lists the data which makes up the graphs

Management, Operation and Maintenance System-Performance Metrics									
Source	Main Line SSOs per Year						Total	Average per Year	Average per 100 miles of sewer
	2007	2008	2009	2010	2011	2012			
Main Lines	1	2	0	1	2	3	9	2	0.008
Volume (gal)	900	1225	0	170	15	937	3247	541	2.879

above.

Table 1

Table 2 below provides a breakdown of the causes of each of the SSOs recorded since

	Mainline Stoppages by Cause							
	2007	2008	2009	2010	2011	2012	Total	%
	Count							
Debris - General						1	1	11.1
Debris - Rags							0	0.0
Flow exceeded capacity							0	0.0
Grease (FOG)		1		1	2	2	6	66.7
Operator Error							0	0.0
Pipe strucural problem/failure							0	0.0
Pump station failure							0	0.0
Rainfall exceeded design							0	0.0
Root intrusion							0	0.0
Vandalism							0	0.0
Contractor Causes	1	1					2	22.2
TOTAL	1	2	0	1	2	3	9	100

2007.

Table 2

Summary of SSO Events and Data *(Continued)*

Sewer mainline cleaning has been relatively consistent over the past three years, with an average of 40.5 miles cleaned each year, or 21.5% of the Collection System.

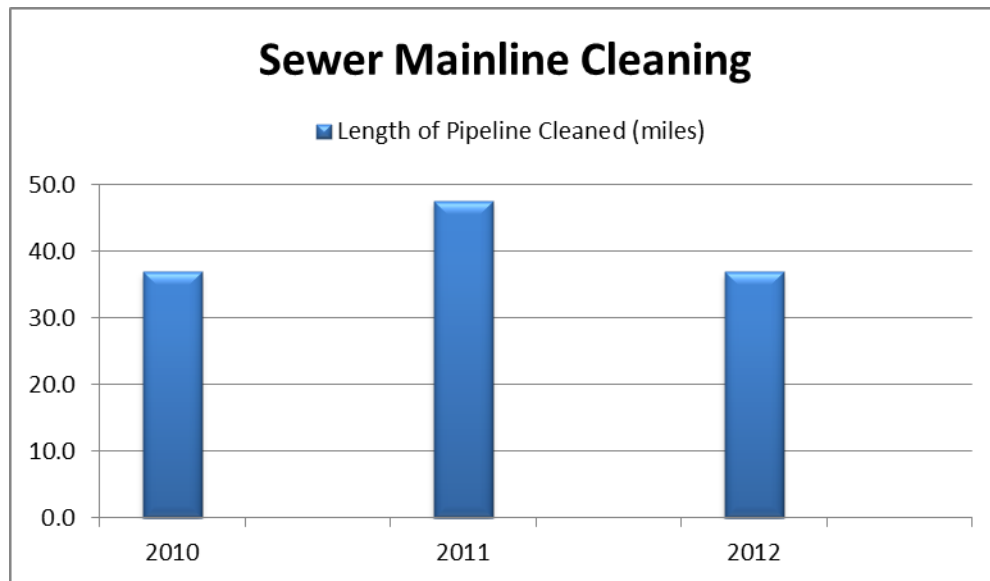


Figure 4

Figure 5. (on page 5) is a map of the City's entire Collection System with the locations of all the SSOs since 2007. There are only two instances where SSOs occurred in the same area. The two SSOs on Tarragon Drive occurred one year apart and were both attributed to swimming pool contractors washing debris into the sewer system. The SSOs on Berry Lane and Central Boulevard occurred three years apart. This map serves as an indicator of overall system health. Since the SSOs occur in random places, the City can reasonably conclude there are no overly problematic areas which are in danger of having SSOs or needing repair.

Summary of SSO Events and Data (Continued)



Figure 5

Audit Approach

As specified in the State Order, the SSMP is comprised of eleven sections or subsets of Section D.13 of the State Order as follows:

D.13.i	Goals
D.13.ii	Organization
D.13.iii	Legal Authority
D.13.iv	Operation and Maintenance Program
D.13.v	Design and Performance Provisions
D.13.vi	Overflow Emergency Response Plan
D.13.vii	FOG (Fats, Oils, & Grease) Control Plan
D.13.viii	System Evaluation and Capacity Assurance Plan
D.13.ix	Monitoring, Measurement, and Program Modifications
D.13.x	SSMP Program Audits
D.13.xi	Communication Program

This internal audit is focused on the above eleven categories as required by the State Order. The evaluation of each element in each category is standardized with sufficiency. Compliance ranking has been based on State Order audit guidelines and sufficiency. A recommendation has been provided when there is enough information to support it.

The format for audit reporting is as follows:

- State Order Section/Subsection
- Sufficiency Ranking
 - Complies
 - Substantially Complies
 - Partially Complies
 - Marginally Complies
 - Does Not Comply
- Findings
- Reference Information
- Recommendation when appropriate

1. Audit of Goals – State Order D.13.i

Review the SSMP to determine if it complies with the State Order by having a goal to provide a plan to manage, operate, and maintain all parts of the City of Brentwood Wastewater Collection System.

Sufficiency: **Complies**

Findings: The City has established a list of goals in its SSMP that complies with the goals established in the State Order.

The City's Goals for the SSMP together with progress to date are as follows:

1. To minimize the number and impact of SSOs:

Complete - Adherence to the SSMP has helped limit the number of SSOs to three or less events annually, with an average annual SSO volume of 528 gallons.

1. Audit of Goals – State Order D.13.i *(Continued)*

2. To maintain our existing infrastructure and plan for future Capital Improvement Projects (CIPs):

Complete - Adherence to the SSMP coupled with sound planning has resulted in an up-to-date infrastructure with no major deficiencies. Future CIPs are planned to ensure infrastructure continues to be kept in good working condition.

3. To continue to provide capacity evaluation for the Collection System and plan for future growth:

Complete - The Wastewater Collection System Master Plan, (Plan) was prepared in 2001. The Plan was subsequently updated in 2006 to accommodate a rapidly growing community. An additional update was prepared in 2010 to forecast Collection System flow conditions at “build-out”, and provided recommendations for capital improvements to optimize the Collection System’s ability to handle the planned growth.

4. To develop a plan to increase the number of staff to meet the obligations of the SSMP:

Ongoing - Planning to increase staffing levels to meet the obligations of the SSMP have proven challenging. Economic difficulties associated with the recent housing bubble resulted in a hiring freeze for several years. The City’s current 10-year Fiscal Model has provisions for adding a Collection System Worker in FY 2014/15. Current staff levels are able to keep SSOs at a minimum, but are not able to accomplish all the Operation and Maintenance goals.

5. To prevent public health hazards:

Complete - Adherence to the SSMP has prevented public health hazards.

6. To detect and reduce inflow and infiltration into the Collection System:

Complete - An influent flow comparison was completed in 2012. This comparison (see Figure 3 on page 8) showed there is no evidence of excessive inflow and infiltration in the winter months. In fact, the winter months exhibited the lowest flows of the year, with the highest flows occurring in the summer months.

1. Audit of Goals – State Order D.13.i (Continued)

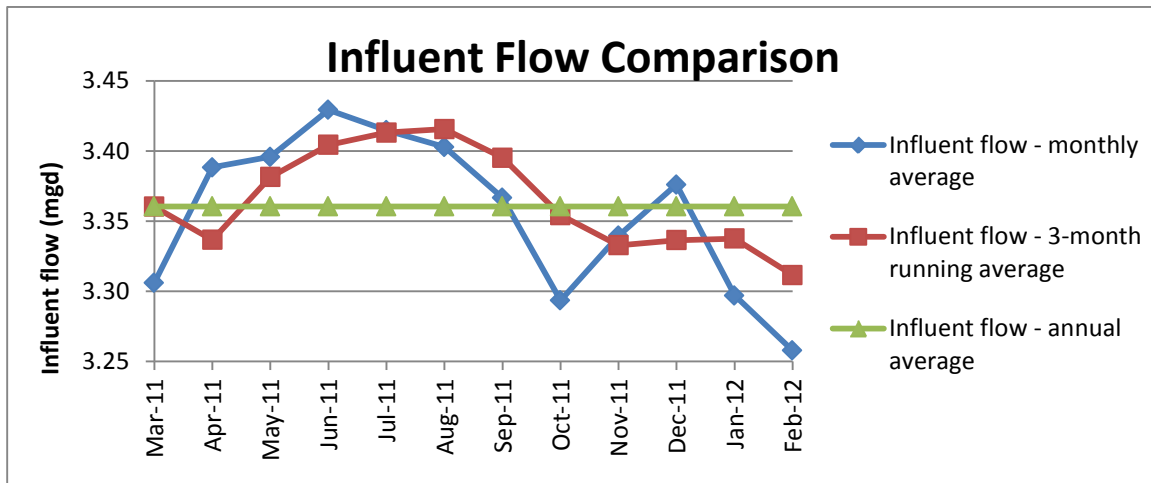


Figure 3

7. To operate the Collection System in a safe and efficient manner, thus maximizing production:

Complete – Since the last audit period there were no lost-time injuries associated with the Collection System.

Reference: City of Brentwood SSMP (COB SSMP).

Recommendation: None. The City is in compliance with the *Goals requirement of the State Order*.

2. Audit of Organization – State Order D.13.ii

Review the SSMP to determine if it complies with the State Order by having the names of authorized representatives published and updated in the SSMP.

Sufficiency: **Substantially Complies**

Findings: The City has identified the names of its authorized representative, management, administration, and maintenance personnel and has shown the chain of communication for reporting SSOs. The organization chart needs to be updated to reflect personnel changes within the City

Reference: City of Brentwood Authorized Representatives List/COB SSMP/Appendix A

City of Brentwood Organization Chart/COB SSMP/Page 4.

City of Brentwood Communication Flow Chart/COB SSMP/Page 6

Recommendation: Update the organization chart to reflect current personnel.

3. Audit of Legal Authority – State Order D.13.iii

Review the SSMP to determine if it complies with the State Order by having ordinances and agreements in place and updated to prevent illicit discharges; provide for proper design of sewers and connections; ensure access for maintenance, inspection, and repair of laterals, limit the discharge of blockage causing debris; and enforce any violation of sewer ordinances.

Sufficiency: **Complies**

Findings: The City has an adopted Municipal Code, (Code) which addresses the legal authority required to carry out actions identified in the SSMP. Specifically, section 13 of the Brentwood Municipal Code prohibits illicit discharges, sets standards for the design of sewers and connections, and provides a means to enforce violations of the provisions within the Code.

Reference: COB SSMP/Appendix D

City of Brentwood Municipal Code/Section 13.

Recommendation: None

4. Audit of Operation and Maintenance Program – State Order D.13.iv

Review the SSMP and activities of staff, consultants, and contractors to determine compliance with the State Order by having, (a) an up to date map of the Collection System which shows all pipe reaches, manholes, siphons, diversion structures, and pump stations, (b) a routine preventative maintenance program, (c) a rehabilitation and replacement plan, (d) an operations and maintenance training program, and (e) a parts inventory program including identification of critical replacement parts.

Sufficiency: **Complies**

Findings: The Collection System Map is kept up-to-date electronically through the Engineering Division and is available on the City's intranet. Collections crews have access to the electronic map room via a laptop in the field, and through desktop computers in the office.

As outlined in the COB SSMP the routine preventative maintenance program covers "hot-spot" cleaning on a quarterly basis, and the balance of the Collection System on a 4-year basis. The City utilizes Maintenance Connection, a computerized maintenance management system which tracks all the activities of the Collection System.

Rehabilitation and Replacement are accomplished through CIPs. The City has a CIP project which annually covers any urgent major pipeline repairs, and is in the second year of a two-year maintenance contract to line several manholes to prevent corrosion.

4. Audit of Operation and Maintenance Program – State Order D.13.iv (Continued)

The City sets aside a budget for Collection System training each year, but when the economy slowed, the available training funds and opportunities diminished. To stay current on industry best-practices the level of training should be increased.

The City maintains a sufficient spare parts inventory.

Reference: Spare Parts Inventory List/COB SSMP/Appendix E

Recommendation: Increase level of training for Collection System personnel.

5. Audit of Design and Performance Provisions – State Order D.13.v

Review the SSMP to determine if it complies with the State Order by having design and construction standards and specifications for installation of new facilities, including coverage for testing of new facilities prior to acceptance.

Sufficiency: **Complies**

Findings: The City has adopted Standard Specifications for, among other things, construction of sewers and sewer appurtenances. A copy of the applicable Standard Specifications (Section 71 and 75) are attached to the COB SSMP. These specifications also address testing necessary for acceptance.

Reference: COB SSMP/Appendix F

City of Brentwood Standard Plans and Specifications

Recommendation: None

6. Audit of Overflow Emergency Response Plan – State Order D.13.vi

Review the SSMP to determine if it complies with the State Order by having an overflow emergency response plan which includes, (a) proper notification procedures, (b) a program which assures proper response to all overflows, (c) procedures which ensure prompt notification of regulatory agencies and other affected entities, (d) procedures to ensure appropriate personnel are aware of the plan and appropriately trained, (e) procedures to address traffic control and crowd control, and (f) implementation of steps to prevent SSOs from reaching waters of the United States.

Sufficiency: **Complies**

6. Audit of Overflow Emergency Response Plan – State Order D.13.vi (Continued)

Findings: The City has a stand-alone Sewer Overflow Response Plan, (SORP) which is incorporated into the SSMP as the required Overflow Emergency Response Plan. This plan effectively addresses notification procedures, assures proper response to overflows, contains procedures to ensure the proper regulatory notifications are made, and has provisions to address traffic control associated with SSOs. Copies of the Sewer Overflow Reports used by staff are found in the SSMP in Appendix B.

Reference: City of Brentwood Sewer Overflow Response Plan
COB SSMP/Appendix B

Recommendation: None

7. Audit of FOG (Fats, Oils, and Grease) Control Plan– State Order D.13.vii

Review the SSMP to determine if it complies with the State Order by having a FOG Control plan with, (a) a public education outreach element, (b) a plan for the disposal of FOG, (c) ordinances, rules and regulations to prevent FOG, (d) requirements to install FOG traps together with standard drawings for traps, owner maintenance, record keeping, and reporting requirements, (e) FOG inspection and enforcement authority and staffing, (f) FOG mapping and cleaning schedule, and (g) source control measures.

Sufficiency: **Substantially Complies**

Findings: The City's FOG program accomplishes all of the above requirements with the exception of (b). The COB SSMP does not specifically list acceptable FOG disposal facilities. FOG is not accepted by the City of Brentwood Wastewater Treatment Plant. FOG from the City is hauled to a regional wastewater treatment plant, Delta Diablo Sanitation District.

Reference: COB SSMP/Appendix C

Recommendation: Update the COB SSMP to include the location of the FOG disposal facility at the Delta Diablo Sanitation District Wastewater Treatment Plant.

8. Audit of System Evaluation and Capacity Assurance Plan – State Order D.13.viii

Review the SSMP to determine if it complies with the State Order by having a Capital Improvement Plan (CIP) which considers, (a) Evaluation of those portions of the Collection System which experience SSO's due to hydraulic deficiency, (b) Design Criteria commensurate with the Collection System, (c) Capacity Enhancement Measures and steps to address short term and long term CIP goals and an implementation schedule, and (d) Schedule for completion of items identified in (a) – (c).

8. Audit of System Evaluation and Capacity Assurance Plan – State Order D.13.viii (Continued)

Sufficiency: **Substantially Complies**

Findings: The City has a Wastewater Collection System Master Plan which addresses the requirements identified in State Order D.13.viii. While this is not a CIP per se, it effectively answers the questions and therefor results in compliance with the intent of the State Order.

The City initially prepared a Wastewater Collection System Master Plan in 2001 following adoption of the “City of Brentwood General Plan 2021.” Due to an extremely accelerated growth rate in the years immediately following 2001, the City updated the Wastewater Collection System Master Plan in 2006. This Plan was updated again in 2010. The 2010 update includes a capacity assessment based on hydraulic modeling of the Collection System with future design flows at ultimate “build-out” development of the City. This modeling identified nine CIPs which will ultimately require some sections of the sewer main piping to be replaced with larger diameter piping, or have parallel piping installed.

The City has not experienced any sanitary sewer overflows caused by hydraulic deficiencies in the existing Wastewater Collection System. As the City grows, the hydraulic capacity of the system will continue to be monitored and the previously identified sections requiring replacement or parallel piping will be implemented as CIPs.

The City has comprehensive design criteria and standards relating to Collection System design and construction. These criteria may be found in the City of Brentwood Standard Plans and Specifications.

References: COB SSMP/Appendix F

Recommendations: None.

9. Audit of the Monitoring, Measurement, and Program Modifications – State Order D.13.ix

Review the SSMP to determine if it complies with the State Order by, (a) maintaining relevant information which can be used to establish and prioritize appropriate SSMP activities, (b) measuring the effectiveness of each element of the SSMP, (c) assessing the success of the preventative maintenance program, (d) updating program elements, based on monitoring or performance evaluations, and (e) identifying and illustrating SSO trends, including frequency, location and volume.

Sufficiency: **Substantially Complies**

9. Audit of the Monitoring, Measurement, and Program Modifications – State Order D.13.ix *(Continued)*

Findings: The City began collecting data on SSOs upon the implementation of the State Order. This data is summarized in the figures and tables in the Summary of SSO Events and Data Since the Last SSMP Audit section on pages 3 and 4 of this document. This data continues to support the notion that the City's SSMP is working effectively to properly manage the Collection System. SSO trends based on frequency, location, and volume are readily available, as are records of pipeline cleaning.

Several monitoring parameters which are listed in the SSMP are not readily available to measure effectiveness. The following parameters are listed in the SSMP and should be tracked more closely to provide a better measure of the effectiveness of the SSMP:

- Average and maximum response time
- Percent of total overflow volume contained or returned to sewer

While these parameters are available in the California Integrated Water Quality System reports, they can also be tracked internally to better ensure proper and timely response to SSOs.

References: COB SSMP

2013 SSMP Internal Audit/Summary of SSO Events and Data Since the Last SSMP Audit section

Recommendations: Internally track response times and percentage of overflows contained to ensure proper response to overflows.

10. Audit of SSMP Program Audits – State Order D.13.x

Perform an internal audit of the SSMP to determine if it complies with the State Order by evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

Sufficiency: **Complies**

Findings: The City has embarked on this audit of its SSMP within the two-year requirement specified in the State Order. The previous audit was performed in March of 2011 and submitted on March 15, 2011. This audit is due by March 15, 2013, with the next audit due March 15, 2015.

This audit is considerably more in-depth than the previous audit and represents a more thorough and comprehensive examination of the SSMP. Several deficiencies were identified in this audit and appropriate recommendations have been made.

References: COB SSMP/Appendix H

10. Audit of SSMP Program Audits – State Order D.13.x *(Continued)*

Recommendations: None

11. Audit of Communication Program – State Order D.13.xi

Review the activities of staff to determine if they have complied with the State Order by, (a) communicating the performance of the SSMP with the public, and (b) providing the public the opportunity to provide input.

Sufficiency: **Complies**

Findings: Public input was solicited during the development of the SSMP in 2006 and 2007. Since the adoption of the SSMP, there has been little public input to the program.

With the completion of each audit, City staff will make the audit available to the general public by posting it, along with a copy of the SSMP, on the City's website.

References: City of Brentwood website: www.brentwoodca.gov

Recommendations: Post a copy of the SSMP and SSMP audit on the City's website.